

A amateur Radio

The magazine for **AUSTRALIAN** radio amateurs

Volume 75 Nos 1 & 2
January/February 2007



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2006
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plus

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Amateur Radio

Volume 75, Numbers 1 & 2
January/February 2007

The Journal of the Wireless
Institute of Australia
ISSN 0002-6859

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Production Deadlines

General articles, columns and
advertising booking 10th day of
previous month.

Hamads and advertising material 15th
day of previous month

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Note Icom and Wyong.

Outside Back Cover advertisement. There has been a late change of arrangement and the donated door prize will now become a raffle prize instead.

Our Cover this month

**Nathaniel,
VK3FNAT, at the
21st Australian
Jamboree.**

**See our cover story
on page 11.**



Photo:

Robert Broomhead

Contributions to Amateur Radio

Amateur Radio is a forum for WIA members' amateur radio experiments, experiences, opinions and news. Manuscripts with drawings and/or photos are always welcome and will be considered for publication. Articles on disc or email are especially welcome. The WIA cannot be responsible for loss or damage to any material. A pamphlet, 'How to write for Amateur Radio' is available from the National Office on receipt of a stamped self-addressed envelope.

Back Issues

Back issues are available directly from the WIA

National Office (until stocks are exhausted), at \$4.00 each (including postage within Australia) to members.

Photostat copies

When back issues are no longer available, photocopies of articles are available to members at \$2.50 each (plus an extra \$2 for each additional issue in which the article appears).

Disclaimer

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Amateur Radio Service

A radio communication service for the purpose of self-training, intercommunication and technical investigation carried out by amateurs; that is, by duly authorised persons interested in radio technique solely with a personal aim and without pecuniary interest.

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The world's first and oldest National Radio Society
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The Australian Amateur Radio Service

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Editorial Comment

Peter Freeman VK3KAI

Here we are at the start of a new year. I trust that you all enjoyed the festive season. Personally, all went well. I spent several days engaged in family activities, which tends to happen at that time of the year. The down side – the radio gear was predominantly in the OFF state and it appears that I missed lots of Es propagation events on the six and two metre bands! I am sure that David Smith VK3HZ and his team will have coverage in the VHF/UHF column. I was lucky enough to come home early from work one day last week to find that two metres was open to VK4, resulting in seven contacts. Now that the “silly season” is behind us, we need to think of other activities and tasks.

AJ2007

Early January saw significant exposure of amateur radio to an almost captive audience of over 10,000 young Australians. For almost 2 weeks, amateur radio was one of the on-site activities at the Australian Jamboree 2007 held at Elmore. See our cover story, which outlines the V13JAM station and reports on the ARISS contact with the International Space Station. The ARISS contact sounded great, even though I could only hear the signal from the ISS whilst monitoring the downlink frequency from Churchill. Two neighbours that I invited into the radio shack to listen certainly found it fascinating.

Weather and its consequences

Much of Australia has been experiencing low rainfall for an extended period – at least six years here in the Latrobe Valley in south-eastern Victoria. As a consequence, much of the country is very dry. Combine that fact with high wind days, some thunderstorms and the undesirable activities from some people with anti-social attitudes and the inevitable occurs – bush fires. Here in Gippsland, the fires started in early December. They are still burning as I write this report, in the middle of January. Fortunately, most of the fires have been in the “bush”, with little impact on private property. Some houses were lost and one person died after falling from a trailer whilst in motion.

There have been fires in other areas as well – I trust that few individuals have been impacted directly. Here, we have had many days with the air filled with smoke, making life uncomfortable and physical activity outside inadvisable, due to the high concentration of smoke particles.

Throughout much of the period, WICEN in Victoria has been on “standby”, although mainly unofficially. There have been official periods of standby status and activations. A dedicated band from RECOM – a group of trained amateurs who are also members of Red Cross – have been active in maintaining the flow of information regarding the movement of displaced people and providing back up communications to the Red Cross Emergency Relief Headquarters.”

Official WICEN members are usually in a good state of readiness, can you say the same? If a major event occurs, the normal communications channels rapidly become stressed by the increased usage. This will often result in an activation of WICEN. With very large events, additional volunteers may be required. Are you prepared? One way of checking your preparedness is to participate in one of the Field Day contests. As I write, the Summer VHF/UHF Field Day is less than a day away. By the time you read this comment, it will be well gone and the logs submitted. Your next chance will be the John Moyle Memorial Field Day Contest. The rules are listed elsewhere in this issue and are also available on the WIA website. With both six hour and 24 hour sections, you do not need to commit the entire weekend. Please participate, even if only as a home station. Remember to send in your log – give Denis VK3ZUX/VK4AIG some more work as Contest Manager!

As has been the practice for several years, the January and February issues have been combined. We will be back to our regular monthly schedule from the next issue.

With lots of content and the Annual Index, I must apologise for not including the VK7 and Moonta ARC news items. These should appear next month, when more space should be available.

Cheers,
Peter VK3KAI

What is amateur radio?

The WIA started the year 2006 with 3,675 members and by the end of 2006, there were 4,113 members of the WIA.

This represents a 12% increase in the year, reversing the annual drop of around 5%, which until a couple of years ago had almost become accepted as inevitable, with what many considered to be a dying hobby.

That increase is very important, because the WIA can either grow or shrink. It cannot just stand still. If it shrinks, it cannot afford to offer members more services, rather it may have to restrict what it does offer and so being a member is less attractive.

The total cost of the basic administration of an organisation of 4,000 members is not that much different from the total cost of the basic administration of an organisation of 5,000 members. As an organisation grows, so it can afford to provide better services for its members, and importantly for the longer-term security of the organisation, ultimately employ a qualified and experienced manager. As the organisation grows, so it should become more attractive to be a member, and so it should continue to grow.

Of course, there may be a number of reasons for the current increase in WIA membership, including at least 1,000 new amateurs in the period, thanks to the Foundation licence, a better image of the organisation, perhaps avoiding conflicts and what is so often called "politics", perhaps better marketing, perhaps a better recognition of what the WIA does to represent amateurs as the advocate for amateur radio, perhaps an organisation that is seen as vital for the qualification of amateurs, perhaps an organisation that is seen as being more open, perhaps all of the foregoing.

I am sure that a major contribution to the increasing membership is the fact that the number of amateurs is increasing.

But how do we attract new amateurs? Or, at least, generate a better awareness as to what amateur radio can be?

One of the things I have repeatedly been told when I have visited clubs is the need for a new, attractive brochure,

to promote not just the WIA, but amateur radio generally.

We have now produced such a brochure, and we are enclosing a copy with each mailed copy of this month's AR.

It represents a lot of time and a lot of effort. Many people have contributed to the concept and we have had the assistance of a professional design company. It attempts to identify amateur radio in association with a whole range of activities. We have attempted to make it socially relevant.

I do hope you like the new brochure, and even more importantly, you will be able to make use of it.

We will also be sending a number of copies to each affiliated club, and we will be able to provide further copies for particular events.

To produce such a brochure costs money. We believe that in today's world of sophisticated marketing and eye grabbing competition, we have to produce high quality brochures and other materials (such as the Foundation Licence Manual) to be effective.

We want to grab attention, and to encourage the reader to seek more information.

When I first started writing this "Comment" I assumed, in a very non-analytical way, that how best to use the brochure as a tool was obvious. But then I started thinking about that, mainly because I had a couple of hours with Robert Broomhead, who with Phil Wait, were the two Directors behind this project.

It is interesting, isn't it?

How we can best use the brochure depends, I suspect, on two major factors – where you are and what you identify as the best opportunities.

It may be placed on the community notice board in the local supermarket, perhaps it may be available in the local library, or at the local high school, perhaps it may be useful at a local Rotary or Lions or similar meeting, it may be at a display, or (as I found only yesterday at the 21st

Scout Jamboree at Elmore as they made contact through amateur radio with the International Space Station) at a major Scouting event.

The more I thought about it, the more apparent it became that how a marketing tool is best used may be quite different in each capital city, but even more different outside the cities and in remote parts of Australia.

That is why I really do hope we receive feedback from individuals and clubs, identifying the best means of using the brochures in the environments they know.

It is also why I see the role of the clubs as vital, just as vital as they are in the whole education program.

I know that many clubs conduct amateur radio displays at shopping centres, festivals or at other special events. Some operate special event stations at museums and the like, and some are involved in the Scouting movement and in setting up displays for Scout groups and the like. We hope that at all these events those conducting them will be assisted by an appropriate brochure.

But at the same time it doesn't make sense to have a whole bunch of brochures sitting in a box in a clubroom doing nothing or overflowing in brochure stands but not being read. That is why we have decided to send them in appropriate quantities for a particular event.

And of course we want feedback, so that we know how they are working.

The WIA is asking its members and clubs to share with us their comments on the brochure, how they have used them and on their effectiveness in delivering the message.

The WIA Board hopes that we have produced a useful tool, which at least goes some of the way to answer the question that is the title of this "Comment".

In the end, the objective is simple: let's work together to make amateur radio grow and the WIA better and stronger.

ar

Late delivery of AR in December

Some members did not receive their December 2006 issue of Amateur Radio until after Christmas.

It appears that Australia Post gave priority to Christmas mail, and unfortunately this was the result.

If you still have not received your December issue by the time you receive this issue, please let the office know and you will be sent a replacement copy.

The WIA responds to Discussion Paper

On 13 November 2006, ACMA published on its website a discussion paper by their commissioned private consultants, Spectrum Wise Radiocommunications Consultants, reviewing government spectrum holdings. It sought comments by 31 December 2006.

The amateur service must have an interest in this review because of the existing spectrum sharing arrangements with government bodies through "secondary user" status recognised in the Australian Radiocommunications Spectrum Plan. The main "primary user" is the Department of Defence. These bands are most of the bands between 420 MHz and 24250 MHz.

WIA President Michael Owen VK3KI appointed a group of experts to advise the Board on the issues raised by the Discussion Paper and, if thought appropriate, prepare a submission.

The group consisted of Peter Young VK3MV, licensed since 1965, with a background as a maritime communications engineer and former ACA/ACMA Regional Manager. Peter was the first Manager, BPL project team, for ACMA; Keith Malcolm VK1ZKM, who has been a licensed amateur since 1967 and is the retired manager of former Department of Communications, IT and the Arts Communications Laboratory, with extensive experience of ITU-R Study Group and WRC meetings, and the WIA's nominated member of the Australian delegation to WRC-07; and John Martin VK3KM, a licensed amateur since 1967 and Chairman of the WIA Technical Advisory Committee.

Peter acted as chair and WIA Secretary Ken Fuller VK4KF acted as coordinator and rapporteur to the group.

The group recommended to the Board that the WIA make a submission, which they had drafted. The WIA Board accepted the recommendation, and just before Christmas, it was lodged with the Consultants. A copy of the submission has been placed on the WIA website.

In releasing the WIA's response, the President said that the WIA Board acknowledges with gratitude the valuable work of this group, whose expertise and knowledge must be very hard to equal.

The 2007 John Moyle Memorial Contest

WIA Director, Trevor Quick VK5ATQ released the following statement in early January:

If you think you are ready for providing communication assistance at any time then give it a try. You will be surprised at all the things that can go wrong, or right if you plan well. A great way is to combine your trial with a contest. The most appropriate is the John Moyle.

The aim is to encourage portable operation, and provide training for emergency situations. The rules are therefore designed to encourage field operation. The contest takes place on the 3rd full weekend in March and runs from 0100 UTC Saturday to 0059 UTC Sunday, 17-18 March 2007.

This is your chance for a time away from home, to play radios, and test your skills. You will meet a lot of fellow amateurs as well. Enter either the 6-hour or the 24-hour section. Designed for you to enjoy, so send your logs to Denis Johnstone VK4AIG/VK3ZUX and make sure he has plenty to do as Contest Manager.

Details and the official 2007 rules can be found on the WIA website.

ISS contacts Australian Jamboree

On Sunday 7 January 2007, at about 2115 local time, Suni Williams KD5PLB on board the International Space Station made contact through Bill Lynd VK4KHZ via the Telebridge with the station established by the Scout Radio and Electronics Unit (Victoria) at the 21st Australian Jamboree at Elmore, north central Victoria.

20 Scouts who had won a competition for submitting the best questions were lined up and ready to ask their questions

during the 10 minutes the space station was in range.

The contact was repeated on the Jamboree FM station, and is available on the WIA website. In addition, several hundred people at the Jamboree were listening to the almost perfect signals.

The contact had been organised by the Australian ARISS coordinator, Tony Hutchison VK5ZAI, with NASA.

The amateur radio activities at this Jamboree of over 11,000 Scouts had been supported by ICOM, the Wireless Institute of Australia and Amateur Radio Victoria, and were a great success, with many Scouts now seeking to get their Foundation licences.

ARRL takes the FCC to court over BPL rule

The ARRL, the national society of radio amateurs in the USA, has filed a Petition for Review in the United States District of Colombia Circuit, seeking a review of the Federal Communications Commission's (FCC) recently adopted rule that exempts BPL operators from having to do anything to correct interference to mobile operations other than to notch emissions to a level 20dB (below 30 MHz) or 10 dB (above 30 MHz) below the absolute limits specified elsewhere in the rules.

The FCC is the regulator of non-government spectrum in the US.

Essentially, the ARRL (supported by two other parties intervening) is saying that the FCC has ignored certain facts that it should have taken into account in formulating its rules.

If the ARRL succeeds, the Court will order the FCC to reconsider its decision taking into account the facts that it previously failed to take into account.

The Court will not substitute its judgement for that of the expert agency, nor will the decision deal with more than this rule affecting mobile operations.

This sort of legal challenge is very expensive, no doubt the ARRL Board has acted very carefully, but are convinced that a successful outcome will influence the FCC to act in the future having better regard to its legal obligations.

Unfortunately, because of the very narrow issues of fact involved and the very specialised nature of administrative law, the US case cannot be seen as a model for Australia.

The magical (noise cancelling) properties of Delta Loops

Felix Scerri VK4FUQ

Yes, I know we're all concerned about BPL but, as I recently remarked to someone, 'BPL, that's nothing. I've got severe power line noise! Blessed (cursed?) with aerial power lines in my location, power line noise 'hash' has been a very long time problem at this QTH (since at least the mid 1980s, when I was first licensed). By its very nature, it is dependent upon general weather conditions and, as such, can be highly variable in its appearance and intensity. It is often so severe that interference is evident on the VHF FM broadcast band and UHF television channels, not to mention the HF bands!

Speaking of the HF bands, trying to read any station through an S9 noise level is a painful and demoralising experience, let me assure you! Noise blankers have very little useful effect, and DSP units are marginally useful, but not a cure. Particular antenna configurations can be useful, but nothing really solves the problem to any great extent.

However, perhaps now I have at least 'cured' the problem as much as it is ever likely to be! In some ways I have been revisiting the past, as the solution involves the use of an antenna type that I was heavily involved with, particularly on 20 m, when I first became licensed in the late 1980s, 'The One Wavelength Delta Loop'. In those days, when I had several pipe masts available to me (sadly, no longer the case), a favourite configuration of mine was the 'inverted' Delta Loop supported between two pipe masts.

Apart from the general excellence of that antenna, as a result of several experiments, I had noted at the time that general power line noise hash pickup could be minimised by a specific feed-point position along the loop. As the loop runs through both horizontal and vertical planes (when mounted 'vertically'), it is easy to vary the general polarisation of the antenna through feed-point position. Due to changed circumstances, it has been many years since I've been able to erect a Delta Loop antenna. However, spurred on by this maddening power line noise hash, I decided to give it another go, at least on the 20 m band.

Having only one 10 metre pipe mast available, I erected a Delta Loop antenna as a triangle, with the apex up. It was initially fed (with balanced feeder as a 'tuned line'), in the middle of the lower horizontal section. Sadly, no real reduction in power line pickup was noted, compared to my standard inverted V antenna.

Next, I tried feeding it at one of the

corners along the bottom horizontal section. The result was a very marginal improvement but not significant. I was ready to give up on the loop, but there was one more position to try – feeding it at the top. It was at this point that I was glad I use pulleys on the mast, something that makes raising and lowering an antenna relatively easy. I quickly reconfigured the antenna with the feed-point at the top and pulled the loop into shape.

I went upstairs and switched the transceiver on. The noise level on receive, previously around S7, now was only S1-2. A remarkable reduction in noise pick up. To be sure, I looked out the window to check if the antenna was still up. It was! This was clearly the optimum feed-point position for minimal noise pickup.

One of my antenna texts tells me that the antenna polarisation in this case should be 'mixed', containing both horizontal and vertical components. Whatever the reason, it works just fine. It would be interesting to find out if the Delta Loop is actually preferable to a traditional Quad Loop owing to this 'mixed' polarisation profile. It is indeed a pleasure to be able to hear signals normally hidden beneath the power line noise. The power line noise is still there, even on the Delta Loop, but at least now it's at a tolerable level. The reason for this improvement is probably complex but, without a doubt, being able to tweak the overall antenna polarisation is the key; and as I already knew, the Delta Loop is a pretty good antenna overall!

It would be nice to see if this noise reduction can be further enhanced. However, my personal feeling is that individual noise problems are likely to be unique and, as such, will need to be customised for best results. Certainly, carefully optimising the feedpoint position on my 20 m Delta Loop has effected a great reduction in power line noise hash pickup at this location on that band.

It is interesting to note that, before I decided to erect the Delta Loop, I had tried different 'orientations' with my standard inverted V antenna. No reduction in noise pickup was noted during those tests. Sadly, it would appear that 20 m is the only band where I can take advantage of this approach, given space and other practical considerations. Having said that, if you are plagued with severe power line hash interference and/or other noise problems, and are able to erect a full wave Delta Loop, then this approach is worth trying.

It has been nice to re-establish my earlier love affair with the Delta Loop antenna, even though this latest investigation has been prompted by a strong desire to ameliorate the effects of severe power line hash interference. I had initially thought that the 'triangle' form of the Delta Loop I ultimately used would suffer from a big reduction in 'effective' height compared to other loop configurations or simple dipoles. But, at least on 20 m, I've noticed absolutely no performance deterioration compared to my usual 20 m inverted V with a top height of 10 metres. I suspect that 'top' feeding actually helps matters here as well.

In fact, using the Delta Loop for an extended period has made me realise that there is something special about the Delta Loop antenna overall. Those who've also extensively used full wave loops in their various forms, either singly, or as a parasitic array, will probably know what I mean. Anyway, I'm very happy with mine. It's an easy antenna to erect, works very well and, best of all, with a little 'feedpoint position optimisation', is a very quiet antenna 'on receive'.

Incidentally, the Delta Loop data is as follows: length formula $l \text{ (ft)} = 1005/\text{frequency}$. Each side length is 1/3rd of the formula length (equilateral triangle).

ar

A 50 ohm, 200 W dummy load/power meter

Drew Diamond VK3XU

When extended tests are performed on transmitting amplifiers, it is preferable that the transmitter's output power be absorbed in a non-radiating "dummy load" of appropriate impedance, for which a purely resistive element of (usually) 50 ohms is required.

Ordinary wire-wound resistors - the usual method of obtaining higher power dissipation - have far too much self-inductance for radio frequency work. Non-inductive high-power metal-film resistors are available in some values, but supply is usually difficult and costly.

Experimenters have had some success in using arrays of high value carbon, or metal-film resistors, each of perhaps 2 W or 3 W rated dissipation. The usual execution comprises two discs of brass or circuit board, with resistors of appropriate number and value, all connected in parallel and spaced around the perimeter of the discs to provide the necessary terminating load resistance (Reference 1). However, two discs, or rectangles, with sufficient area to contain 200 W worth of resistors has significant capacitance (typically 4 pF), so the SWR of such an arrangement may be unacceptable at higher frequencies.

Offered here is a load that uses an alternative method of housing an array of 94 ordinary, 4.7 k Ω , 2 W carbon resistors to provide a low SWR, convection-cooled 50 ohm load capable of absorbing 200 W continuously, or 400 W at 50 % duty cycle. SWR of the prototype is less than 1.2 from DC to 28 MHz. Metering of the RF load current is provided, thus permitting direct estimation of dissipated power. Being a peak responding meter, PEP readings of reasonable accuracy are obtained. In addition, a -40 dB signal sample port is fitted to allow for the convenient connection of other instruments, such as an oscilloscope, frequency counter or spectrum analyser.

Circuit

See Figure 1. 94 x 4700 ohm resistors are spaced along a 260 mm length of transmission line, comprising a 5 mm (5/16th inch) brass rod "inner" conductor positioned centrally between circuit board strips, which form the "outer" of the line,

as shown in Photos 2 and 3. Unwanted stray inductance and capacitance is thus kept to a minimum.

Current transformer T1 has a turns ratio of 40:1, so the current through the 470 Ω metal-film terminating resistor will be 1/40th of that in the line (References 2 and 3). Therefore, for a 50 ohm load current of 1 A, current in the 470 ohm is 25 mA, thus establishing a voltage of 11.75 V. When applied to a single diode detector, a voltage very near 1.3 times the RMS will be available at the 100 nF filter capacitor for metering. Therefore, we get $1.3 \times 11.75 = 15.275$ rounded to 15.3 V dc.

The 0 - 50 scale of an ordinary 50 μ A meter suits our measuring range of 0 - 5 A RF. For the above example, where 1 A RF

is flowing (which shall read 10 μ A on the meter), and 15.3 V dc is produced, then the series multiplier resistance must be 15.3 divided by .00001 = 1.53 Megohm. In practice a standard 1.5 M resistor gives a sufficiently accurate result.

The ammeter circuit is utterly replicable (i.e. iterations of the circuit give predictable results), so the current meter, if duplicated closely, does not need individual calibration. Thus, power delivered to the load may be estimated:

$$P = I^2 \times R \text{ (Watts)}$$

so when the load is 50 ohms

$$P = I^2 \times 50 \text{ (Watts)}$$

For example: 1 A in 50 ohms = 50 W, 2 A = 200 W, and so on.

The two right-hand 4.7 k, and two 100 ohm resistors form a -40 dB pi attenuator



Photo 1 - The 200 W dummy load.

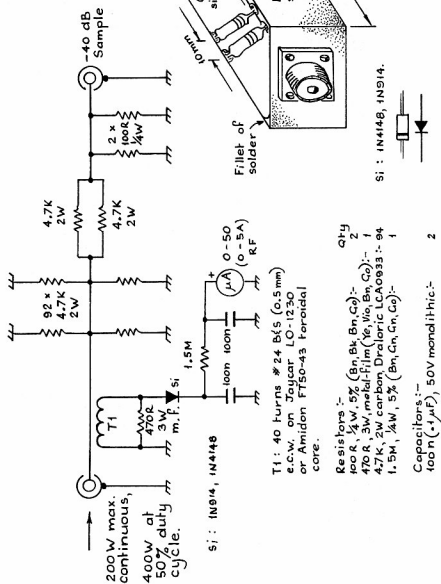


Figure 1 – Schematic of the dummy load/power meter.

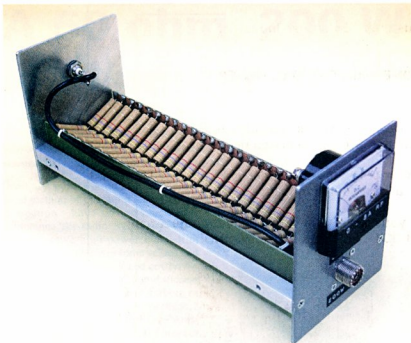


Photo 2 - The resistor assembly.

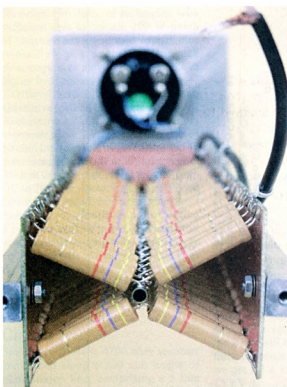


Photo 3 - End view of the resistor assembly

the SO-239 coax socket is sandwiched between the front panel and the resistor assembly.

The resistor assembly end-view is pictured in Photo 3, which illustrates how the individual resistors should be arranged. Note the additional support given by fitting 3 mm countersunk screws and nuts near the rear end of the resistor assembly. Top and bottom covers were fabricated from 1.3 mm perforated aluminium sheet, obtained from a local metal recycler.

When building the resistor assembly, begin by making the circuit board sides and pre-drilled connector end, dimensioned as shown in Figure 1. Use a flat reference device, such as a mirror, as an aid to soldering the sides straight and parallel. Test for rightness upon the mirror with an engineer's square. Apply small "tacks" of solder first, and then form a fillet when correctly aligned.

Temporarily mount the SO-239 socket. Remember to install the current transformer at the connector end before soldering. For the Jaycar toroid, you will need an insulated spacer to hold the core upon the tube. Photo 4 shows a suggested method, where a short length of RG-8 inner insulation has been bored out to 5 mm, then slipped over the tube upon which the wound core is a snug fit.

Solder the brass tube (obtainable from model shops) to the coax socket centre pin. Use a wood block, or similar object, at the far (rear) end to correctly position the tube prior to soldering. A small hole, or filed slot in the connector end of the tube, will considerably aid in getting the solder to flow where required for a good connection.

Begin soldering the resistors at the far end of the assembly, spaced by 10 mm in each row. Mark with pencil down the fibre of one of the sides, thus giving a guide to their spacing. By alternating each resistor side to side, top to bottom, we accommodate all 94 without difficulty, and allow space at the connector end for the current transformer.

The last two resistors are connected to two parallel 100 ohm short lead resistors for the -40 dB output. If this feature is not required, simply solder all 94, 4.7 k Ω resistors to the circuit board foil. A short run of RG-58 coax, wired as shown, may be used to connect the attenuator to a suitably different (suggest BNC-f) connector fitted to the rear panel.

which, when connected to an instrument whose input impedance is 50 ohms (or "terminated" right at an instrument's high impedance input with a 50 ohm thru termination), provides an exact replica signal whose voltage will be 1/100th that of the input signal - a very handy feature.

Construction

A suggested method of housing the load is shown in Photo 2, where the resistor assembly is a snug fit between two parallel 12 mm square aluminium rods. Front and back panels, made from 3 mm aluminium sheet, are attached with 4 mm countersunk screws, which engage in threaded holes in each end of the support rods. The mounting flange of

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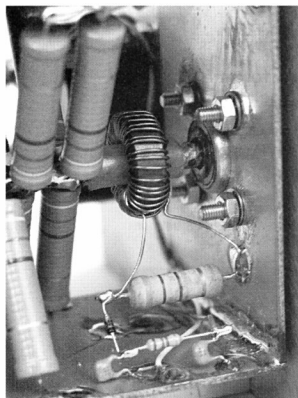
In addition. We also offer a very competitively priced Australian made 5:1 braking winch.
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Qld. Australia.

Mob. Ph. 0414 254 080

email: aeitower@spin.net.au



Operation

The load can dissipate 200 W continuously - if properly ventilated. For higher power (above 2 A), use a proportionately shorter duty cycle. To estimate CW or PEP power, simply square the current reading and multiply that by 50.

Parts

The Draloric 4.7 k Ω , 2 W resistors were purchased from Rockby Electronics (Ph 03 9562 8559). Minimum order is a box of 250 resistors at 2 cents each, P/N 19782 - total \$5 plus post (I suggest building one with a mate - otherwise you will have 156 spare resistors!).

Any good 50 μ A

meter will serve - mine is a QP-5012 from Jaycar.

Toroidal core for T1 may be an LO-1230 (pack of six for about \$2 from Jaycar), or an Amidon FT50-43 (see Hamads for your local supplier).

A suitable length of 3/16" (5mm) tube, described as "K & S Engineering 3/16 round brass, stock # 129" - was purchased for a few dollars at a local model shop.

The remaining electronic parts are obtainable from any of the usual component suppliers, including Altronics, Jaycar, DSE and Electronic World.

References and Further Reading

1. VHF/UHF Handbook; Edited by Dick Biddulph, G8DPS, 1998 edition., pp 11.8, 11.9.
2. "RF Ammeters for High Frequency Measurements"; Amateur Radio, November 2004.
3. Backyard Antennas; Peter Dodd, G3LDO, published by RSGB, pp 184,185.

Photos: Andrew Diamond
(www.andrewdiamond.net).

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Photo 4 - Current transformer and diode detector assembly.

WA's new Yaesu Dealer

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- 6) Back Lighting
- 7) VFO programmed (input freq. from keypad)
- 8) Hi & Lo Power select
- 9) Channel spacing: 5KHz, 10KHz, 12.5KHz, 25KHz
- 10) Keypad lock
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| SMA to BNC Converter | \$5 |

21st Australian Scout Jamboree

Robert Broomhead VK3KRB
vk3krb@unixtech.com.au

The cover photo depicts Nathaniel Ballinger VK3FNAT, who attended the 21st Australian Scout Jamboree at Elmore, in central west Victoria in early January. On this page, we see his homebrew two-metre antenna, and a glimpse of part of the campsite.

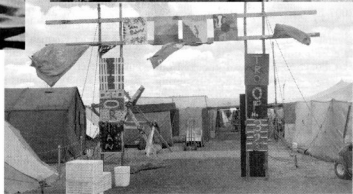
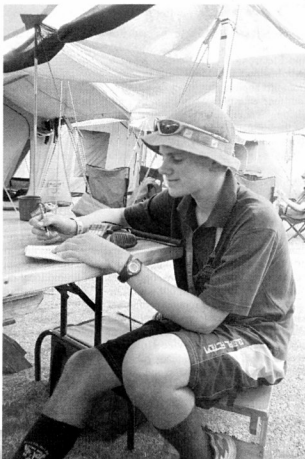
Nathaniel fitted his Scout group out with a homebrew two-metre quarter wave ground-plane antenna which he constructed with the help of Scout leader Ash Clark VK3SSB.

Nathaniel reported excellent coverage from his Scout portable QTH, with 5/9 signals into all local repeaters.



Photo 1 and 2 (above and above right): Nathaniel with his homebrew quarter-wave vertical for the 2-metre band.

Photo 3 (right): The entrance to the troop's campsite—the mast and antenna is just visible to the right of the entrance gate



The 21st Australian Scout Jamboree AJ2007

– Get in the game

Sleepy Elmore invaded by 13,000 energetic youngsters

Robert Broomhead VK3KR8

On 2nd January 2007, the quiet Victorian country town of Elmore had a population explosion by a factor of about 10 as it became host to around 13,000 Scouts and 8000 leaders and assistants attending the 21st Australian Scout Jamboree called AJ2007. The 12-day Jamboree, held at the Elmore Field Day grounds, came complete with its own police station, hospital, fire station, FM radio station, multiple rock stages, and of course hundreds of amazing activities for 13,000 energetic Scouts.

Taking prime location near the centre of the Jamboree site was the Scout Radio and Electronic Service Unit's amateur radio station VI3JAM. Visually locatable from just about anywhere within the site (due to its enormous antennas and masts), visiting Scouts kept VI3JAM active and on the air since early Tuesday morning. *The Jamboree had only just started and we had so many contacts within Australia and overseas, it was fantastic. All the station equipment is working perfectly and the Scouts have just been having a ball* said station manager Hayden McManus VK3FRST.

The Radio and Electronic Service Unit constructed four individual operating positions within a large modern air-conditioned Atco hut. Each operating position was fully decked out with state of the art radio and computer equipment kindly donated by Icom Australia and BKB Internet. Outside, the antenna farm constructed by the Service Unit was very impressive. Independently rotatable beams were in place for 2 m and 70 cm,

10/15/20 m, and 6 m, as well as a series of dipoles for operating on the lower HF bands.

VI3JAM was on the air, on the usual calling frequencies for all bands 160 m through 70 cm.

Encouragingly, a number of Scouts attending AJ2007 and visiting the VI3JAM station had already heard of the new Foundation Licence. A number of young Scouts attending the Jamboree already had Foundation call signs and were spotted roaming the Jamboree with 2 m or 70 cm handhelds strapped to their belts.

All Scouts visiting the VI3JAM station were given information on amateur radio and the new Foundation Licence by way of promotional material provided by the WIA. The material included the WIA's new colour brochure "Calling CQ", which outlines the many enjoyable and interesting aspects of the hobby. Also included in the promotional material was a listing of contact details for the group leaders from the various radio

clubs providing Foundation training and assessment. The promotional material also included a follow-up form, which could be filled out to request follow up by the Radio and Electronic Service Unit with more information on how to become a radio amateur. Also on sale at the VI3JAM station were copies of "Your entry into Amateur Radio", the Foundation licence manual, for anyone who was keen to purchase a copy and start studying.

A highlight for the Jamboree, and the VI3JAM station, was when the 20 lucky Scouts who had entered the "What would I ask an astronaut" competition via the AJ2007 website and were selected to pose their questions in person to Suni Williams KDSPLB in an ARISS hook-up with the International Space Station (see the following story).

A commemorative QSL card is being issued to all stations who have worked VI3JAM. The WIA website has a series of photos taken around the Jamboree and VI3JAM station sites.

Spotlight on SWLing

Robin L. Harwood VK7RH

2007 has arrived and HF propagation has been up and down. There have been several fadeouts which have disrupted telecommunications. Also, a minor earthquake near Taiwan knocked out undersea cables, severely disrupting telecommunications between Asia and the rest of the World for about a week.

As predicted, DW largely ceased using senders from Germany, following the contract with VT Merlin. Although the Nauen site in the former East Germany is still being used, the majority of DW

programs now are transmitted from outside of Germany.

The former German Telecom sites of Werchatal and Julich are still transmitting, but for other clients such as the Polish Radio or sundry religious broadcasters. Christian Voice International takes possession of these two sites mid year.

Radio Finland exited HF on the 31st December, leaving Radio Sweden International as the sole Scandinavian broadcaster left on shortwave. The disappearance of Radio Finland also saw

the cessation of regular weekly news bulletins broadcast in classical Latin. Vatican Radio only has Latin Masses.

I must apologise for this hurried brief column this month due to my father's death from a terminal illness. I have a eulogy to prepare. I soon shall get back to normal monitoring, as I have renewed my subscription to dxtuners.com and Bigpond Broadband also has significantly increased their download limit for the same rate, which will make matters more economical.

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The lucky Scouts erupt in a cheer at the end of the contact with the International Space Station.

VI3JAM contacts the ISS

Robert Broomhead VK3KRB

Over the last couple of weeks, we have been keeping you up to date with the preparation and activities of VI3JAM the special event station of the 21st Australian Scout Jamboree held in the country town of Elmore in Victoria. The highlight of AJ2007, the 21st Australian Scout Jamboree, was on Sunday evening when a planned hook-up with the International Space Station took place, enabling 20 Scouts to speak with Suni Williams KD5PLB. The 20 lucky scouts were selected from the 13,000 attending the Jamboree through a "What would I ask an astronaut" competition conducted via the AJ2007 Jamboree website. Everything was going to plan – well almost everything. The contact was on schedule, the equipment was working, the 20 scouts were pumped, but unfortunately so was popular New Zealand rock band *Evermore*, which was providing a concert on the main Jamboree stage some 500 metres away and playing

through a massive EAW PA system. The acoustic interference was causing the entire VI3JAM shack to vibrate and shake. Luckily Alistair VK3FAWB, a professional in the audio industry, came up with the great idea to line the exterior shack wall facing the band with a 6 foot stack of hay bales. The team constructed the wall and provided what felt like 3 dB of noise reduction from the band. With this in place and 20 Scouts ready at the microphone, and many hundreds more outside the shack looking on via close circuit television and with the event simulcast on the local Jamboree FM radio station, the contact was underway.

An ARISS telebridge was utilised and Philip Adams VK3JNI kicked off proceedings initially talking via the telebridge to Will Marchant KC6ROL from the space science laboratory at the University of California, the team leader for the evening's ARISS contact, then in turn speaking with Shane VK4KHZ

providing the uplink from his home in VK4 to the ISS orbiting some 300 km above the earth.

Right on schedule, the voice of Suni Williams KD5PLB was heard loud and clear and the question and answer session began. Everyone listened intently.

The whole contact worked perfectly and ended in an enthusiastic cheer from both the team inside the shack and the many hundreds listening outside.

The AJ2007 team would like to acknowledge ICOM, BKB Internet, Minuteman Press, ARV and the WIA who all generously supported the amateur station and enabled the ISS contact.

If you would like to hear a full recording and see pictures of the contact, then visit the WIA's website, <http://www.wia.org.au/> and click on the news story titled "NAISS calling – and the band played on".

Photos by Robert Broomhead VK3KRB.

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Global Educational Network for Satellite Operations

Attention all telemetry and data collection buffs! An ESA Assessment Study for this project began in June 2006 and a large number of the study team attended the AMSAT-UK 2006 Colloquium as part of the SSETI contingent. AMSAT-UK representatives later attended a meeting hosted by Neil Mellville of ESA, where they received a briefing on the purpose of a project called GENSO, which is to provide a global infrastructure that will be available for future educational satellite projects. It is envisaged that a world-wide network of ground stations could increase real time collection of telemetry data from amateur [and other scientific] satellites from an average of 3% at present to a potential 60%. This data could be available in real time on the www resulting in a huge improvement in efficiency. As a result of this meeting,

The AMSAT group in Australia

The National Co-ordinator of AMSAT-VK is Graham Ratcliff VK5AGR. Contact Graham if you wish to be placed on a mailing list for breaking news and net reminders. As a forum for members AMSAT-VK operates two monthly nets.

AMSAT-Australia Echolink Net

The "Echolink" net meets on the second Sunday of each month. Anyone with an interest in Amateur Radio Satellites is welcome to join the net. Graham VK5AGR acts as net controller. The net starts at 0500 UTC during summer time periods and 0600 UTC during winter standard time periods. Connect to the AMSAT conference server on Echolink a few minutes before these times.

AMSAT-Australia HF net.

The HF net meets informally on the second Sunday of each month. In winter (end of March until the end of October) the net meets on 3.685 MHz at 1000 UTC. In summer (end of October until end of March) the net meets on 7.068 MHz at 0900 UTC. Start listening 15 minutes before these times.

All communication regarding AMSAT-Australia matters can be addressed to:
AMSAT-VK,
9 Homer Rd,
Clarence Park, SA. 5034
Graham's e-mail address is:
vk5agr@amsat.org

AMSAT-UK joined with ESA, the SSETI Association, UNISEC, and several universities around the world, to determine the technical feasibility of the project and define a comprehensive set of technical requirements with suggested design solutions. A month later, the first workshop was held at the University of Tokyo to discuss the proposal and the potential for inter-continental collaboration. The response from the amateur radio and academic communities was particularly promising. The implementation plan produced at the second workshop, held in September, included work packages, a preliminary schedule and a budget framework. The plan was presented to the International Space Education Board during the International Astronautical Congress held in Valencia in October. The Board gave the go-ahead to start the design and implementation of the software and hardware, with the objective of running a pilot phase in around a year's time. A workshop is planned for February 2007 to discuss progress and the core features should be ready for testing by mid-2007. If all goes according to plan, they hope to have the network fully operational from November 2008 onwards. ESA will provide funding for software development and overall project management. The project will bring together other space agencies like CSA, JAXA and NASA. Neil Melville of ESA said, "One of the key aspects of this project will be that the network is developed 'by students for students', with the technical support and guidance of the space agencies and the radio amateur community". So far the amateur radio input has been provided by AMSAT-UK, who has been asked to define the typical ground station in terms of hardware and to provide supporting software. They will be asking for your input in the form of a questionnaire which will appear on AMSAT-BB. The data collection and ground station software, developed as part of the project will be made available to the AMSAT community. More information can be found at:

http://www.esa.int/esaED/SEM8HFZBYTE_index_0.html

Watch also the AMSAT-UK website.

AMRAD AO-27 controllers lose contact.

Reports are to hand that the AMRAD team members are having difficulty in establishing communications with this LEO. It has not figured highly in activities in this part of the world. Apart from brief periods early in its life, it has only been switched on while over the northern hemisphere. AO-27 was launched on September 26, 1993. It carried an uplink on 145.850 MHz FM and a downlink on 436.795 MHz FM.

More Cubesats

Another batch of Cubesats was due for launch on 11th December 2006. AX.25 1200bps FM/AFSK telemetry transmissions should be available on 70 cm immediately after deployment. Details will be available at www.Genesat1.org.

Six-monthly review of operational satellites in the amateur radio service

VO-52 HAMSAT

Catalogue number: 28650
Launch Date: May 05,2005
Status: Operational
U/V: Indian Transponder in use at present
Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz
LSB/CW
Downlink: 145.870 MHz to 145.930 MHz
USB/CW
Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz
LSB/CW
Downlink: 145.875MHz to 145.925MHz
USB/CW
Indian Beacon: 145.859330 MHz CW
Dutch Beacon: 145.860MHz 12WPM with CW message
Webpage: <http://www.amsat.in/hamsat.htm>

AO-51 ECHO

Catalogue number: 28375
Launch date: June 29, 2004
Status: Operational
Analog voice downlink:
435.300 MHz FM

435.150 MHz FM
 2401.200 MHz FM
 Analog voice uplink:
 145.880 MHz FM
 145.880 MHz USB
 145.920 MHz FM 67 Hz PL tone
 1268.700 MHz FM 67 Hz PL tone
 Digital Downlinks: Pacsat Broadcast Protocol
 435.150 MHz FM, 38k4 Digital
 435.150 MHz FM, 9k6 Digital
 2401.200 MHz FM, 38k4 bps, AX.25
 Digital Uplink:
 145.860 MHz FM, 9k6
 1268.700 MHz FM, 9k6
 Broadcast callsign: PECHO-11
 BBS callsign: PECHO-12
 Webpage: <http://www.amsat.org/amsat-new/echo/>

SO-50 SAUDISAT-1C

Catalogue number: 27607
 Launched: December 20, 2002
 Status: Operational
 Uplink: 145.850 MHz
 Downlink: 436.795 MHz

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz to arm the ten minute timer. Then transmit on 145.850 MHz (FM Voice) using 67.0 Hz to access the repeater within the 10 Minute window.

FO-29 JAS-2

Catalogue number: 24278
 Launch Date: August 17, 1996
 Status: Operational
 Voice/CW Mode JA
 Uplink: 145.90 to 146.00 MHz CW/LSB
 Downlink: 435.80 to 435.90 MHz CW/USB
 Beacon: 435.795 MHz
 Digital Mode JD
 Uplink: 145.850 145.870 145.910 MHz FM
 Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
 Callsign: 8J1JCS
 Digitaltalker: 435.910 MHz
 Current mode switching details on the AMSAT web site.

AO-7 AMSAT OSCAR 7

Catalogue number: 07530
 Launch Date: November 15, 1974
 Status: Operational when in sunlight
 Current Reported mode: Mode-A
 Uplink:
 145.850 to 145.950 MHz CW/USB

Mode A
 432.125 to 432.175 MHz CW/LSB
 Mode B
 Downlink:
 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
 145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
 Beacons: 29.502 MHz, 145.972 MHz
 Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

International Space Station (ISS) - ARISS

Catalogue number: 25544
 Launch date: November 20, 1998
 Status: Operational
 Current Mode: Occasional Voice
 The Expedition 14 crew is:
 Commander: Michael Lopez-Alegria - KE5GTK
 Flight Engineer: Mikhail Tyurin - RZ3FT
 Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:

Worldwide packet uplink:
 145.990 MHz FM
 Worldwide packet downlink:
 145.800 MHz FM

Voice:

Region 1 voice uplink: 145.200 MHz FM
 Region 2/3 voice uplink: 144.490 MHz FM
 Worldwide downlink: 145.800 MHz FM
 SSTV testing reported on 145.800 MHz FM

Callsigns:

German: DP0ISS
 Russian: RS0ISS, RZ3DZR
 USA: NA1ISS
 Packet Mailbox: RS0ISS-11
 Digipeater callsign: ARISS
 Official ARISS Webpage: <http://www.rac.ca/ariss>

AO-51 ECHO

Catalogue number: 28375
 Launch date: June 29, 2004
 Status: Operational
 Current Mode(s):
 FM Repeater - V/U
 PBBS - V/U - 9k6 PBP
 Analog voice downlink:
 435.300 MHz FM
 435.150 MHz FM
 2401.200 MHz FM

Analog voice uplink:
 145.880 MHz FM
 145.880 MHz USB
 145.920 MHz FM 67Hz PL tone
 1268.700 MHz FM 67Hz PL tone
 Digital Downlinks:
 435.150 MHz FM, 38k4 Digital, PBP 1 watt output
 435.150 MHz FM, 9k6 Digital Pacsat Broadcast Protocol
 2401.200 MHz FM, 38k4 bps, AX.25
 Digital Uplink:
 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
 1268.700 MHz FM, 9k6 PBP Digital
 Broadcast callsign: PECHO-11
 BBS callsign: PECHO-12
 Webpage: <http://www.amsat.org/amsat-new/echo/>

AO-16 PACSAT

Catalogue number: 20439
 Launch Date: January 22, 1990
 Status:
 Semi-operational, the digipeater command is open for APRS users.
 Uplink:
 145.900 FM
 145.920 FM
 145.940 FM
 145.960 FM
 Downlink:
 437.026 MHz SSB (1200-baud PSK)
 Mode-S Beacon: 2401.1428 MHz
 Broadcast callsign: PACSAT-11
 BBS callsign: PACSAT-12
 Webpage: <http://www.amsat.org/amsat/sats/n7hpr/ao16.html>

UO-11 OSCAR-11

Catalogue number: 14781
 Launched: March 1, 1984
 Status: Semi-operational
 Telemetry Downlink: 145.826 MHz.
 Webpage: <http://www.users.zetnet.co.uk/clivew/>

The above list is not exhaustive but includes those of most interest to amateurs in this part of the world. A number of satellites are listed elsewhere as operational but only their beacons are active – or they are at present undergoing testing or recovery efforts. A complete list is kept up to date on the AMSAT-NA web site.

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Awards

Mal Johnson VK6LC
WIA Awards Manager.

WIA Multiband DXCC Program annual "DXer awards" 2006

This new annual award was introduced in June 2005 and has only been running 18 months. We have now 17 stations certified. For this period, we have six operators that have top tallies for 3BDXCC, 4BDXCC, 5BDXCC, 6BDXCC and 9BDXCC.

They are:

1. 9BDXCC - VK.

Peter Forbes VK3QI of Glen Iris, Victoria. Top tally of 2416 countries over 9 Bands.

2. 6BDXCC - DX.

Helio Carlota PY2DBU of Jundiá, Brazil. Top tally of 993 countries over 6 Bands.

3. 5BDXCC - DX.

Harry Kotlyarov UA6LDD of Taganrog, Russia. Top tally of 907 countries over 5 Bands.

4. 5BDXCC - VK.

Allan Greening VK3PA of Dunolly,

Victoria. Top tally of 848 countries over 5 Bands.

5. 3BDXCC - VK.

Eddie de Young VK4AN of Maryborough, Queensland. Top tally of 722 countries over 3 Bands.

6. 3BDXCC - DX.

Charlie Ho VR2XMT of Fanling, Hong Kong. Top tally of 615 countries over 3 Bands.

Multiband DXCC Program, 1st September 2005

W.I.A. DXer Awards

The "W.I.A. DXer" awards are for 3-11 Band classes, awarded to Australian and Overseas participants where applicable. The close off date for these awards will be 31 December each year.

It can only be awarded to the same person once in every 3 years and all awards will be judged on performance, participation and spirit exhibited towards the MultiBand DXCC Program.

Certificates:

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WIA DXCC Standings, January 2007

Callsign	Countries	Callsign	Countries	Callsign	Countries	Callsign	Countries	Callsign	Countries
DXCC Ex. (337)		VK3DP	274/277	HS1NGR	101/000	Honour Roll		VK4CXQ	179/000
Phone		VK3UY	264/266	VK5JAZ	100/000	(328) Open		DL6UGF	161/000
VK5WO	337/370	JA7MGP	260/000	VK6ZAI	100/000	VK2UK	336/341	VK5ATU	158/160
VK6LK	337/362	VK2XH	257/000	DXCC Ex. (337)		VK4LC	335/382	VK2AR	156/159
VK3QI	337/351	DL3ASJ	256/000	CW		VE6VK	335/380	VK3VB	153/155
VK3DYL	337/343	VK8NSB	255/000	Position Vacant		VK4UA	335/372	VK6HZ	151/000
VK3SX	337/343	VK3CMB	254/258	Honour Roll		VK3AMK	335/354	VK3JXO	146/000
Honour Roll		VK8DK	253/254	(328) CW		VK3AKK	335/348	VK2SPS	144/145
(328) Phone		VK6DU	245/252	VK6HD	336/357	VK3EW	335/341	SV1XV	142/144
VK6HD	336/362	VK2FHM	243/000	VK3QI	336/348	VK3OT	334/348	VK4EZ	140/147
VK5MS	335/389	VK4AC	240/000	VK5WO	335/351	VK2AVZ	333/344	ON9MCR	129/140
VK4LC	335/382	VK8KTC	231/233	VE6VK	330/357	CT1EEN	333/337	ON5SPA	127/000
VE6VK	335/372	VK4DMP	227/228	General listing		VK4AAR	333/337	VK3OZ	126/127
VK4UA	335/370	DL6MRS	226/000	- CW		VK3UY	333/336	VK7CQ	123/125
VK3AMK	335/354	UA6LDD	225/226	VK6RZ	322/327	PY2DBU	328/343	VK5DC	117/118
VK3AKK	335/348	VK8AM	225/000	VK3AKK	312/317	VK6RZ	328/334	NOMSB	117/000
VK2FGI	335/341	VK2AU	210/000	VK3KS	307/335	General listing		VK9RS	111/000
VK3EW	335/341	VK3DVT	206/209	VK4LV	300/307	- Open		VK2AJE	109/000
VK6NE	333/349	VK6RZ	201/204	CT1EEN	294/000	VK6RO	326/333	VK2WL	105/106
VK2AVZ	333/344	VK7JAB	198/000	VK6AJ	292/304	VK4LV	324/332	UA0IGV	103/000
VK1ZL	333/339	VK2EO	195/000	VK4ICU	291/000	VK3JI	322/351	VK2AWD	102/106
VK2DEJ	333/339	G0VXX	184/000	VK4AN	281/287	VK6LC	318/320	VK5CO	100/106
VK3OT	332/336	VK3PA	178/179	VK3J	274/299	VK4DV	315/330	VK5GX	100/101
CT1EEN	332/336	VK2EJ	176/000	VK2CWS	245/247	VK4AN	311/319	DL1APX	100/000
VK3OT	331/335	9A2KL	172/175	VK3DP	245/247	VK4ICU	311/313	RA3BZ	100/000
VK4AAR	331/345	VK6EH	170/000	VK3DQ	243/270	DL1TC	302/303	VK1AI	100/000
VK6APK	330/335	VK2BQS	166/169	VK3CIM	235/236	VK3KE	300/303	General listing	
VK3CSR	329/338	DL9UBF	165/000	RD3AF	233/000	VK7TS	295/296	- Data	
VK3Euz	328/329	DL6USA	162/000	VK7TS	219/000	PY2DBU	294/298	VK3EBP	253/255
General listing		VK5EMI	160/000	VK3KE	215/000	VK2HV	289/000	VK3AMK	200/202
- Phone		VK7LUV	160/000	VK6RO	209/211	VK3CIM	284/288	VK3KE	197/000
VK3YJ	327/333	VK4ARB	159/160	VK7PA	203/000	VK6ANC	284/288	VK2BQS	126/128
VK5FV	326/329	JA6KTY	156/000	VK2GR	181/188	9A2KL	280/283	VK4AN	123/000
VK4SJ	326/327	VK6HZ	151/000	VK2GR	181/188	UA6LDD	279/280	DL4ARJ	120/000
VK2UK	324/329	VK2SP	143/145	PY2DBU	181/183	VK6DU	277/280	ON5SPA	111/000
EA3AKN	323/331	VK2QS	141/000	VK4CXQ	174/000	VK3JMB	277/000	CT1EEN	110/000
VK6ABS	322/000	VK3JXO	141/000	VK5UO	171/172	VK6MK	256/259	VK5RY	100/102
VK4LV	319/321	VK3DJ	138/152	SP9ADV	168/171	VK8NSB	256/000	Gen-listing 6 m.	
VK1TX	319/000	VK8LC	137/000	DK6AP	168/000	VK3DQ	255/284	Open	
VK6LC	317/319	VK4FNQ	134/000	DL6USA	165/000	VK5UO	251/255	VR2XMT	154/000
VK6RO	313/320	SV1XV	130/131	VK4UA	151/164	VK2CWS	251/253	VK4FNQ	141/000
VK3JI	310/325	VK4FNU	130/131	VK4AAR	145/147	VK2FHM	247/000	CT1EEN	110/000
DL2AWG	309/000	WA5UA	128/000	VK2AR	140/143	VK4DA	237/239	VK4ABW	109/000
PY2DBU	308/315	VK4VIS	127/129	VK8AM	138/000	VK8AM	236/000	VK6JQ	103/104
VK4ICU	303/305	VK5ATU	126/128	NOTM	135/000	DL9UBF	206/208	VK4CXQ	101/000
VK4EJ	300/302	VK2IIR	125/101	DL1TC	133/000	DL6USA	201/000	Gen-listing -	
VK6DY	297/301	CU3AAP	125/000	VK7DQ	131/132	SP9ADV	200/203	Satellite	
JA3EY	296/300	SV1UT	123/000	DL6UGF	126/000	VK3PA	187/188	VR2XMT	112/11
VK3KE	295/298	VK2VZQ	122/000	VK6DU	125/127	VK2GR	184/191	VK3XDQ	106/000
DL1TC	294/295	VK4EZ	119/125	DJ4BG	121/000	VK2BQS	183/186		
VK3DU	292/301	VK5UO	112/115	VK5BWW	110/113				
VK2CA	291/000	VK3CML	109/000	SM6GZN	110/111				
VK2CSZ	290/293	AX4EJ	105/000	T94VT	108/000				
VK4AN	289/296	SV1EOS	105/000	9A2KL	103/000				
VK2HV	288/000	VK9RS	104/000	DL3GDS	102/000				
VK4BAY	287/290	VK2RO	103/105	DXCC Ex. (337)					
VK7TS	285/286	3W2LC	103/000	Open					
9V1RH	283/285	SV1FTY	102/000	VK5WO	337/374				
VK6ANC	282/286	SV1GYG	102/000	VK6HD	337/364				
VK3JMB	275/000	VK6ISL	102/000	VK3QI	337/352				
				VK3SX	337/343				

If your callsign is not listed it means you have not updated in the last 5 years.

Awards information and downloadable files are available on our WIA website <http://www.wia.org.au/awards/> or email to: awards@wia.org.au.

WIA Awards Manager
P.O.Box 196, Cannington,
Western Australia. 6987.
Mal. VK6LC

The WIA QSL Collection

Ken Matchett VK3TL

What you should know about the WIA QSL collection

The first thing that should be realised is that, as a member of the WIA, this is your collection of QSL cards. We hope that it is a collection of which you can be proud, for it has been built up over a period of more than forty years through the generous donation of hard-earned QSLs of hundreds of amateur radio operators from both Australia and overseas, together with valuable QSL cards donated from 'silent key' estates.

Some may believe that the Collection is concerned only with old QSLs. It is true that it contains a vast selection of such QSL cards dating back to 1921, when QSL cards were not printed, but were hand-written. It is indeed an extremely historically valuable collection that can be used by researchers of radio history. Photocopies of valuable QSLs may be obtained by historians free of charge upon request. Any member of the WIA is welcome to visit, by arrangement, the vast collection of QSLs, numbering hundreds of thousands. Displays of QSL cards have been held at several Radio Conventions. Individuals and clubs have the opportunity of purchasing at cost price a DVD (with audio) portraying a range of both pre-war and post-war QSLs. Such images give some idea of the early story of amateur radio, especially in the field of DX.

The pre-war part of the disc contains approximately 160 images of the QSLs of our own old-timers as well as those of many pioneers of radio, including Reinhardt 1XAM of the USA and De Loy of France F8AB, who in November 1923 became the first operators to bridge the Atlantic. The QSL of Alf Traeger 5AX, inventor of the pedal radio is here, together with the antenna designers Reg Varney G5RV, Carl Mosley KOAXS, Loren Windom W8GZ and Dick Bird G4ZU. Present in the Collection are the QSLs of Frank Bell Z4AA and Cecil Goyder G2SZ, who together made the first two-way radio contact on the amateur bands between NZ and Australia in October 1924. Also there are the QSLs of the world's most well known DXpeditionists, as well as those of kings, princes and senators.

The post-war part of the DVD (approximately 230 images) contains special prefix call-signs, most of which commemorate some significant historical event. It also contains an interesting thematic section and some of the most attractive pictorial cards in the world.

It should be remembered that today's QSLs will be rare items in another fifty years, so modern QSLs are also important to the Collection. It is a wonderful thing to save something for the future, be it vintage

cars, heritage buildings or amateur radio equipment and QSL cards.

From time to time, the WIA makes appeals to all WIA members to play a part in building up and maintaining this valuable archival QSL card collection. Will you play your part?

The WIA takes this opportunity of wishing its members many happy hours on the bands, and for those interested in DX, good DXCC hunting.

Yours in amateur radio
Ken Matchett VK3TL
Hon. Curator, WIA QSL Collection
4 Sunrise Hill Road,
Montrose Vic 3765
Tel: 03 9728 5350
Email: jeandawson@iinet.net.au

Thanks for contributions to the collection

The WIA would like to thank the following for their kind donation of QSLs:

Estate Gil Moody VK3ZR. A good DX-er in his day. These were pre-war German QSLs carrying the old prefix D. A few of them showed the swastika and one QSL showed the operator at his desk with a photograph of Herr Hitler on the wall behind him. It's all history, isn't it? Cards courtesy of John VK3IQ.

continued on page 47

WIA MultiBand DXCC Program. January 2007

Call sign	2m	6m	10m	12m	15m	17m	20m	30m	40m	80m	160m	Bands	Total
VK6HD			303	259	321	299	332	303	331	314	240	9	2702
VK3QI			289	271	300	282	335	303	292	236	108	9	2416
VK3EW			278	231	304	254	328	137	292	284	106	9	2214
CT1EEN		110	294	290	324	305	328	146	243	163		9	2203
VK6WO			155		153	106	254	109	225	134		7	1136
PY2DBU			199	125	187	104	276	102				6	993
UA6LDD			189		190		191		189	148		5	907
VK6LC			119		153		307		180	134		5	893
9V1RH				141	264	119	222		129			5	875
VK3PA			133		139		253		136	187		5	848
VK2CA			163	102	205	112	210					5	792
VK4AN			217		233		272					3	722
VR2XMT		154			127	162	172					4	615
VK3DYL			114		168		296					3	578
VK3KE			114		175		286					3	575
VK2DEJ					114		305		101			3	520
WA6UA			102		106		128					3	336

We hope Father Christmas brought you all you (thought) you wanted for Christmas and that despite this, you all had a great Christmas and New Year.

From the weather maps, it would seem that Australia is living up to its reputation as the 'driest continent' in the world and that South Australia is the driest state in Australia – well, except for parts of Western Australia, where they had better than average rains. But that is Australia, isn't it? A land of extremes. But isn't it the best country to call home?

The Florence Mackenzie Trophy

At last it is mounted on a suitable shelf in a prominent position – proudly on show, in the headquarters of the Scout Radio Interest Group in South Australia. If you remember, this is where the radio gear donated to ALARA several years ago is housed and used regularly.

Interestingly, this group came into being associated with the Radio Shack set up at the Jamboree in VK5 several years ago, and in the email this week is this story:

On 2nd January 2007, the quiet Victorian country town of Elmore had a population explosion by a factor of 10 as it became host to around 13,000 Scouts and 8000 leaders and assistants attending the 21st Australian Scout Jamboree called AJ2007. The 12-day Jamboree being held at the Elmore Field Day grounds comes complete with its own police station, hospital, fire station, FM radio station, multiple rock stages and of course hundreds of amazing activities for 13,000 energetic Scouts.

Taking prime location near the centre of the Jamboree site is the Scout Radio and Electronic Service Unit's amateur radio station VI3JAM. Visually locatable from just about anywhere within the site (due to its enormous antennas and masts), visiting Scouts have already kept VI3JAM active and on the air since early Tuesday morning. "The Jamboree has only just started and we have had so many contacts

within Australia and overseas, it's just been fantastic. All the station equipment is working perfectly and the Scouts have just been "having a ball" said station manager Hayden McManus VK3FRST"

The precedent set in VK5 has been continued in VK3 with the radio activity being a prominent part of the whole Jamboree. The callsign VI5JAM was used for the earlier Jamboree, so the tradition is continuing.

How good it is to see Hayden VK3FRST, obviously one of the first VK3 Foundation licensees, as the spokesman for the station.

I hope many of you had contacts with VI3JAM and continue to encourage the young people who will be our future amateurs.

There was a contact between VI3JAM and the International Space Station which would have been heard by everyone listening on the frequency. I hope lots of the readers heard the contact and enjoyed it.

The International YL Meet in Mumbai

from Gwen VK3DYL

For 4 days in October, I had fun representing the YLs of both Australia

and New Zealand while attending the 8th International YL Meet, this time in Mumbai, India. This was my 5th International Meeting and I enjoyed catching up with past friends and making new ones.

The Meet was under the direction of Sarla VU2SWS, herself a member of ALARA.

Sarla had hired a couple of buses to take us sight-seeing around Mumbai, though how those buses managed to make their way through the horrendous traffic was quite unbelievable. ALARA members Unni and Ingrid, together with myself, one afternoon hired a Tuk-tuk in which to travel to the shopping area – never again! Our nerves were frazzled but we still managed to shop and drink beer/coffee. However, we returned to the hotel by taxi!

Two of India's leading dance troupes entertained us for 2 evenings – absolutely fantastic – and another night we were let loose in a shopping Mall – no comment!

The stall traders (and monkeys) on Elephanta Island must have rubbed their hands with glee when they saw us coming but we had fun bargaining, and that's the main thing.

After 4 days, the main part of the group took off for a train and bus trip to Agra, Delhi and other nearby parts, while I had



Mumbai photo - L to R: Ikuko JA5GSG, Sarla VU2SWS, Carol WD8DQG, Eine SM0UQW, Ingrid LA8FOA, Evelyne FB5RPB, Gwen VK3DYL, Mio JR3MVF, Nori 7K3EOP, Unni LA6RHA, Phyllis W2GLB, Inger OZ7AGR (AWOL)

Photograph by Hardy DL3KWF

booked a car and driver to take me to see what I wanted to see, particularly bathing in the Ganges at Varanasi.

At a rough count there were 46 YLs, 14 OM's, 5 VU YLs, and some Indian officials.

I had to give a PowerPoint presentation covering the 30-year history of ALARA – all in 10 minutes, hard work!!!! Altogether another great trip (but I'm glad I don't have to wear a sari every day – hi!)

The photo shows the happy group of ALARA members at the Meet. Thank you for representing us internationally.

Remember the regular lunches

In VK5, these are held at the S.A. Museum in Adelaide at 12 pm on the second Friday of each month.

In VK6, the regular lunches are held on the third Thursday of the month at

the Royal Park Hotel in West Perth at 12 noon. Please contact the appropriate State Representative if you are visiting either of these cities.

And the regular radio nets

Once a month, on a Sunday morning, there is a Friendship Net on Echolink. Contact Shirley VK5JSH for details of frequency, etc.

Each Monday afternoon at 0530 Zulu, the 222 Net is run on 14.222 MHz and on Monday night we have the ALARA Net on 3.580 +/- MHz at 1000 Zulu in summer and 1030 Zulu in winter. All YLs are welcome and the OM's can join in after one or two rounds.

In fact, please do this if you are looking for YL contacts for your ALARA Award. We are always prepared to give you an official contact after the net finishes.

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'Twas The Night Before Christmas – Radio Style

'Twas the night before Christmas,
And all through two-meters,
Not a signal was keying up
Any repeaters.
The antennas reached up
From the tower, quite high,
To catch the weak signals
That bounced from the sky.
The children, Tech-Pluses,
Took their HTs to bed,
And dreamed of the day
They'd be Extras, instead.
Mom put on her headphones,
I plugged in the key,
And we tuned 40 meters
For that rare ZK3.
When the meter was pegged
By a signal with power.
It smoked a small diode,
and, I swear, shook the tower.
Mom yanked off her phones,
And with all she could muster
Logged a spot of the signal
On the DX Packet Cluster,
While I ran to the window
And peered up at the sky,
To see what could generate
RF that high.
It was way in the distance,
But the moon made it gleam -
A flying sleigh, with an
Eight element beam,
And a little old driver

who looked slightly mean.
So I thought for a moment,
That it might be Cousin Dean.
But no, it was Santa,
The Santa of Hams.
On a mission, this Christmas
To clean up the bands.
He circled the tower,
Then stopped in his track,
And he slid down the coax
Right into the shack.
It into the earth, till
The station was grounded.
He tightened loose fittings,
Resoldered connections,
Cranked down modulation,
Installed lightning protection.
He neutralized tubes
In my linear amp...
(Never worked right before
'Twas the Night Before Christmas'
Now it works like a champ).
A new, low-pass filter
Cleaned up the TV.
He corrected the settings
In my TNC.
He repaired the computer
That would not compute,
And he backed up the hard drive
And got it to boot.
(It might be QRP!) Yes!
The Ultimate Station!
How could I deserve this?

Could it be all those hours that
I worked Public Service?
He hooked it all up
and in record time quickly,
Worked 100 countries,
All down on 160.
I should have been happy,
It was my call he sent.
But the cards and the postage
Will cost two month's rent!
He made final adjustments,
And left a card by the key:
"To Gary, from Santa Claus.
Seventy-Three."
Then he grabbed his HT,
Looked me straight in the eye,
Punched a code on the pad,
And was gone – no good bye.
I ran back to the station,
And the pile-up was big,
But a card from St. Nick
Would be worth my new rig.
Oh, too late, for his final
came over the air.
It was copied all over.
It was heard everywhere.
The Ham's Santa exclaimed
What a ham might expect,
"Merry Christmas to all,
And to all, good DX."

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kn4aq@arrl.net

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ar



See you at
Wyong Hamfest

Get In Tune

SGC

The Gold Standard **SG-230**

The SG-230 Smartuner was the first in the HF market with fast, flexible tuning without any user interface. It senses RF when you transmit and automatically finds the best SWR match to your antenna. Works with ANY radio and ANY antenna and requires NO special interface. Use with base station, mobile, marine applications.



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Designed with high density surface mount components on a 4 layer PCB, providing high efficiency, reliability and performance. The PCB is mounted on a sturdy chassis plate, an excellent electrical and RF ground system. Fully waterproof (under 2 ft of water for 24 hours). The case is weather resistant, high grade ABS plastic that is sealed at the factory.



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News from...VK2

Westlakes Amateur Radio Club's Motto is "Progress through Activity".

Frank Lusa VK2FJL

Activities include an ongoing Education program, covering Foundation, Standard and Advanced level tutoring and examinations. The pass rate speaks for itself. Westlakes Field Days have become a must for hundreds of local and interstate amateurs. Each week members can be found in the activity room both giving and seeking assistance in repair of various pieces of equipment. The weekly meat tray has become a much sought after activity, possibly more popular than Westlakes acclaimed Field Day BBQ's.

The radio shack is fully operational; on some days it is standing room only. Contesting has once again become a part of the club's activities, thanks to the efforts of a few dedicated contesters led by Paul VK2BPL. Last year's Inaugural Westlakes Cup



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Westlakes Amateur Radio Club Inc.

VK2ATZ

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This is a Westlakes Amateur Radio Club Project

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Ozgear - Tigertronics' only Australasian distributor - announces: The new SL-USB radio-to-PC interfaces are now available... & SL-1+ sound-card model still stocked.

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Payment?



VK2

Westlakes continued

was another first in many years for the club and should continue to grow. Another contest worth mentioning is the CQ Repeater Contest held in May each year. This is an attempt by the club to encourage more use of at-times stagnant repeaters. It runs for one week and is open to all.

The WIA QSL Bureau is a continuous area of activity where, thanks to VK2ZM with a couple of apprentices, hundreds of cards are processed each week ready for posting.

Once a month, the Library becomes a chaotic mess of paper, staplers and envelopes as the monthly magazine is assembled and made ready for postage.

Last year's activities culminated in a Christmas get-together. Our thanks go to Gloria, our canteen manageress, who unselfishly volunteered to cater for the 70 plus members, families and friends who attended. Gloria was assisted by an energetic committee; however the credit for the result, which was advertised as a buffet lunch but could only be described as a banquet, must go to Gloria's expertise. Amid balloons, streamers, bon bons and jazz caps, the tables were overloaded with a variety of typical Christmas offerings from Turkey to Trifles and everything in between. Unfortunately, the club rooms could not accommodate all the guests; many had to set up under the adjacent awning creating a carnival atmosphere. Pre-dinner activities included a try out with a set of quoits. The ability of those who fronted up is best left unsaid. They certainly would be well advised to stick to playing radio. All agree the day/evening was an outstanding success.

You don't have to take my word for any of the above, check out our web site www.westlakesarc.org.au.

Better still, call in any Saturday afternoon or Tuesday evening and judge for yourself.

Clubs

A new club on the scene is the Snowy Mountains Amateur Radio Club Inc., with the club callsign VK2SNO. They are operating a 2 metre repeater on 147.025 MHz, which is giving coverage up to 50 km from Adaminaby. Increased coverage is planned. Testing is underway with a repeater on 53.575 MHz. They have a net on Saturday night at 2030 on the 2 metre repeater. Their members have a range of activities including HF nets, VHF weak signal, aircraft enhancement, meteor scatter and Morse practice sessions. Instead of meetings and lectures, the Club intends to focus activity on field days and portable operation. The committee is President, Richard VK2HRM, Vice President and Treasurer, Bill VK2ZZF, Secretary and Public Officer, Alan VK2ADB and Repeater and Technical Officer, Fred VK2TVZ. A contact point is via adpeake@internode.on.net.

Last month, Coffs Harbour held their annual field day at a new venue in town rather than at the small clubrooms. A report will be given in future notes. This month is the Central Coast Field Day at the Wyong Racecourse, on Sunday the 18th February. It has been held since 1957. Don't forget the annual Urunga Convention at Easter, first held in 1948. This is followed on the June long weekend by the Oxley Region field day. Hornsby and District have introduced a Morse net to their club activities - Thursday at 8 pm on 3525 kHz.

A note to repeater officers to check out the entries in the 2007 callbook and advise Brian VK2WBK of NTAC and John VK3KWA of FTAC of any corrections. Also on the subject of repeaters - don't sneak your system 'on test' into any site, particularly a commercial one. Every so often the ACMA does a site audit and your test unit could be determined as an unlicensed device with embarrassing results.

The Oxley Region ARC has swapped around their 70 cm repeaters. The southern VK2RPM site now has 438.425 in place

of 8525 due to interference at the site. 8525 will be relocated to the northern VK2RCN site. Equipment overhaul and new antennas at VK2RPM have improved the operation of 6700.

The Hunter Radio Group has made a frequency change to their 70 cm VK2RCN repeater. It is now to be found on 438.025 MHz. The HRG resume meetings this month as well as the Monday evening news net at 7.30 pm. They use some of the VK2WI material in their coverage, so it is a chance to catch VK2WI news should you miss the Sunday transmissions.

Forty years ago, the then VK2 VHF Group was involved in a flying fox hunt on Saturday the 21st January 1967. These bats were raiding the apple orchards at Bilpin in the Blue Mountains and the thought was to equip one of them with a matchbox sized 2 metre transmitter and then track it back to their daytime roost. Well 'Charlie' the volunteer flying fox had other ideas and refused to become airborne before daylight arrived. So everyone packed up and went home and the reporter tagging along with the operation filed his story. The story broke on national radio news at lunch time Sunday, about how 'Charlie' had out foxed the hunters. Upset were some wildlife researchers who had been trying to obtain frequencies for tracking animals without success. A question to the authorities as to why these 'amateurs' could do it and they could not, brought a phone call Monday morning to the VHF Group President who had all the ramifications explained to him. The outcome was that the Department issued an edict that 'flying fox hunts were banned', something which confused other parts of Australia who were not aware of the operation.

ARNSW

It is 50 years since the formal opening of the VK2WI building by [the late] Allan VK2KB, while he was Minister for the Interior in the Federal Government. This took place in May 1957, but I have found a couple of dates. I am asking some of the older Amateurs who were around in 1957 if they can remember the occasion.

Tim Mills VK2ZTM

Via vk2wi@ozemail.com.au

There is a plaque at VK2WI, which says it was on the 15th of May. However this day was a Tuesday. A more likely date which comes up is the 19th, which was a Saturday. Who remembers? If you can help please use the contact details below.

Allan VK2KB received life membership of the NSW Division for services to the hobby. Scanning back into the Amateur Radio notes in Electronic Australia, which were then written by Pierce VK2APQ, there is a report in November 1969 of the presentation to Allan at the September 5th meeting of the Hunter Branch in Newcastle. During the time Allan was in Parliament, there were many occasions that he went in to bat for the hobby. There was one time when the Department had its eyes on the 40 metre band, which they wanted to take away from the Amateurs. Allan had the head of the Department brought before the House to explain the reasons. Needless to say we still have 40 metres.

The Annual General Meeting of ARNSW, the trading arm of the former NSW Division, will take place on Saturday the 14th April 2007. The Secretary of ARNSW, Owen VK2AEJ, has called for nominations for the next Council and for agenda items for the meeting. The close for these will be at 12 noon on Saturday the 3rd March 2007. In early December, ARNSW held an EGM to consider five suggested changes to the Articles. They

were on the number of Councillors and club affiliations. None attained the number of votes required by a Special Resolution to change the Articles. Following the EGM, a period of discussion was held and the meeting then adjourned for the annual end of year party.

Commencing this year, ARNSW will hold Foundation Licence Assessments and exams for Standard and Advanced on the last weekend of the even months. The first will be this month on 24th and 25th February. The April one will occur on 28th and 29th. Inquiries should be directed to the ARNSW office on 02 9689 2417, mail to P. O. Box 9432, Harris Park 2150 or email vk2wi@ozemail.com.au.

Anybody who has been involved with building development knows that it is never a speedy process. At year's end, the proposed shed for the Dural property was still with the local Council. It is going to be a while until the Trash and Treasure has its new home. The next T&T event will be on Sunday 25th March.

2007 Radio Homebrew Challenge

"The Radio Homebrew and Experimenters Group is posting a challenge for all members of ARNSW to build their own transmitter", announced Peter VK2EMU, their Coordinator, recently. It is to be more than a one transistor QRP CW rig, something really useful. The transmitter

is to be Amplitude Modulated in the 80 metre band and crystal locked on 3686.4 kHz. This is a standard computer crystal. The transmitter is to have a power of at least 20 watts, be self contained in its own box and include its own power supply. It can be solid state, valve or a mixture of both. The design can be your own, a commercial kit or anywhere in between. The judging will probably be in July 2007 and the aim of the challenge is for the transmitter to be substantially built during 2007 and not an update or rehash of a 20 year old project.

Learning Morse

ARNSW has a group of volunteers who provide on air transmissions under the call VK2BWI on 80 metres - 3550 kHz. Ross VK2ER, who helps coordinate the operation, advised that there was an increasing interest shown by the callbacks received. What is interesting, however, is that to date there have been no calls in by holders of a Foundation call. Ross further commented that he was recently in Europe, where there is still considerable interest in and use made of Morse in all aspects of operation, even though most countries in Europe had by then dropped the requirements. Strongest interest appeared to be in the eastern European countries. VK2WI continuous Morse is to be found on 3699 kHz.

All the best for 2007.

VK3

Amateur Radio Victoria News

Australian Jamboree – dust settles

What a sterling event to kick off the year! The Scout Radio and Electronics Service Unit worked hard and focused on making the special event station V13JAM a success.

Amateur Radio Victoria is pleased to have been part of this activity at the 21st Australian Jamboree through its sponsorship and two volunteers who helped put V13JAM on air.

The activity that occurred 2-13 January

at Elmore in north-central Victoria is well reported elsewhere in this edition of *Amateur Radio* magazine.

Centre Victoria RadioFest

This new event will take place on Sunday 22 April, at the Kyneton Racecourse only 50 minutes (75 km) by road from metropolitan Melbourne and an hour from Ballarat and Bendigo.

It is being established with the combined resources of the Midland Amateur Radio

Website: <http://www.amateurradio.com.au>

Email: arv@amateurradio.com.au

Jim Linton VK3PC

Club, Central Goldfields Amateur Radio Club and Amateur Radio Victoria.

The possibility of holding a new regional amateur radio event was discussed earlier at the inter-club BBQ on 8 October, 2006, at Laanecoorie. An organising committee was formed late in 2006 with representatives from each group.

Major commercial traders have had instant enthusiasm for the event; some seem to have been waiting for such a marketing opportunity in Victoria.

For the latest information visit the

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Don Jackson VK3DBB

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Note: Prize draw 18th of February 2007 at Wyong Racecourse. Winners notified directly via phone or in person. Name published in March edition of Amateur Radio magazine.

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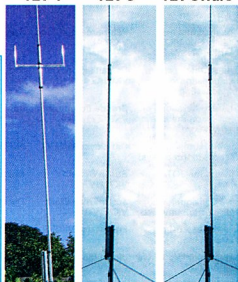
Email: rawmar@hotmail.com

New Tet-Emtron Vertical Range

TEV-4

TEV-3

TEV-3 Warc



Antenna	TEV-4	TEV-3	TEV-3 Warc
FREQUENCY	7, 14, 21, 28 MHz	14, 21, 28 MHz	10, 18, 24 MHz
ELEMENT HEIGHT	4090 mm	3800 mm	5025 mm
FEED IMPEDANCE	50 ohm	50 ohm	50 ohm
Max. RADIAL LENGTH	10.7 metres	5 metres	7.5 metres
SWR	1.5 or less	1.5 or less	1.5 or less
POWER RATING	1 kW	1 kW	1 kW

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STOP PRESS

Parkes to be venue of next WIA Annual General Meeting

The WIA Annual General Meeting is planned for Saturday 5 May 2007 at Parkes, NSW.

The location had been chosen as it would provide the opportunity for a special technical tour of the Parkes Radio Telescope, which should be of great interest to amateurs.

Confirmation of the date and venue and details of the program being arranged around the AGM will be announced in the near future.

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VK3

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Centre Victoria RadioFest website <http://radiofest.amateurradio.com.au/>.

"Calling CQ" a useful tool

The WIA has produced a colourful new brochure called "Calling CQ" which is ideal for promoting amateur radio.

Get a copy, have a read and put it to good use during 2007 to encourage others to join the hobby.

The upcoming Foundation Licence training and assessment sessions being held by Amateur Radio Victoria are: February 17 – 18, March 17 – 18, April 14 – 15 and May 19 – 20. For inquiries contact Barry Robinson VK3JBR 0428 516 001 or arv@amateurradio.com.au

Oppose change to RD Contest

A proposal to expand the memorial aspect of the Remembrance Day Contest is not supported by Amateur Radio Victoria.

The RD Contest Manager, Peter Harding VK4OD, in part said in December, "I personally believe that while we have many thousands of Australians on Service in a Foreign Country, we should be honouring any fallen Australian Radio Amateur Operators from any Overseas conflict, be it Military or Civil, as we have put our safe future in their hands."

However, the Council meeting of Amateur Radio Victoria on 19 December carefully considered and rejected the proposal. It believes the contest should remain solely as a memorial activity for

those honour roll radio amateurs who lost their lives in service of their country during World War II.

The WIA Federal Convention in 1947 resolved that there be established "Interstate contests on all bands annually to perpetuate the names of Amateurs who lost their lives in the services of this country in the recent war."

The preamble for the first RD Contest in 1948 stated that the contest be held annually "during the week-end nearest to 15th August each year – the date on which hostilities ceased in the South West Pacific Area."

Amateur Radio Victoria asks its members to oppose the proposed change which would not only dilute the traditional purpose of the contest, but be impractical to implement.

The RD Contest Manager is seeking the views of all radio amateurs and can be contacted either QTHR or by email vk4od@wia.org.au.

Annual General Meeting

The Secretary, Peter Mill VK3APO wishes to advise members that the Annual General Meeting will be held on Wednesday, 23 May, at St Michael's Hall, corner Victory Boulevard and High Street, Ashburton, commencing at 8 pm.

Notices of Motion for the meeting close 2.30 pm on Tuesday 20 February. A further notice of the AGM and details of the business items to be discussed will be included in an annual report to members.

2007 VHF/UHF Field Day

Over the weekend of January 13-14th, the VHF/UHF Summer Field Day was held, stations all over VK, ZL and P29 took part. Max VK3WT and I (VK3WWV) had planned to get the 2 m and 70 cm phased arrays ready by the contest as it turned out we only managed to sort out the 2 m array. We packed up all the gear and headed off to the Wombat State Forest.

I had been consulting Radio Mobile and noted that the highest point in the forest

was about 889 m, so with Ozi Explorer running on the PDA, we turned off the bitumen and headed into the forest. It wasn't long before I had doubts about my navigation so shortly after entering the forest we pulled over and fired up Ozi Explorer on the laptop and could now see the big picture and realized that we had made a wrong turn. It was not long before we arrived at the pre-determined grid reference and looked about for a suitable operating position, the entire area was at

News from...

a similar altitude so we looked for the highest point. We ended up travelling only a short distance along a reasonable track and chose a nice shady spot at an altitude of 900 m. As you can see in the photo Max is operating 6 m and 70 cm SSB, the 2 m station is off to the left and the generator is located in the foreground. There was quite a bit of activity during the day and it was great to work a few VK5 stations and hearing a VK2 from Kings Cross.

The weather was excellent with a gentle breeze and in the shade I noted that the ambient temperature was 15° C so we both were wearing jumpers. We didn't make a lot of contacts but it was a great day out and as a result we have a few issues to attend to before the John Moyle Memorial Field Day in March. It was around 19:30 when we packed up, but this time when we left Max insisted that the laptop was activated so he could

navigate out of the forest. I think I need to learn more about planning a route and navigating between waypoints. I took some video of our operating and will post one or two to my site on youtube. To locate these just go to www.youtube.com and do a search for "vermontcreekbed".

Don't forget the JMMFD in March, now is the time to start preparing your gear.

VK3WWW Jack and VK3WT Max.



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VK3

continued

Geelong Radio And Electronics Society (GRES)

Rod Green VK3AYQ

The last months of 2006 saw our members involved in many community based activities. John Collins VK3JCC taught a Foundation Licence course for the last school term of the year. John taught this on a Tuesday morning at the local Grovedale Secondary College. It is hoped that his initiative in approaching schools with the offer of teaching this course will lead to more courses being offered in the future. Bill Husin VK3YHT and Albert Stevens VK3EFO gave a presentation on amateur radio to one of the district SES groups. The SES group had observed the club operating portable in the John Moyle Memorial Field Day. As a result of this, they wanted more information about the activities of amateur radio operators.

Our group of retired members, who meet on a Wednesday, have also been out and away from the clubrooms. On more than one occasion, they gave their time to a local charity organization who build and donate computers for those not fortunate enough to be able to afford a new computer system. The group has also been behind bars. They have reconstructed the wireless in the "Old Geelong Gaol". During the 1950s and 60s, a two channel wireless station was available for the entertainment of the prisoners. This was

not wireless in the true sense, as each cell was hard wired to a main radio room. The station was operated by one of the inmates and offered music and "local" news. The interesting thing about this project is that it did not cost anything. All material and equipment used for the project was either sourced from the very large GRES junk box or was donated by members.

Most of our members are also members of WICEN. These WICEN members supplied communications for the annual Otway Classic Bike ride. This is a 160 km ride through the Otway Ranges and also along the historic Great Ocean Road. Entrants pay a fee to participate and all money raised is donated for heart research. Fortunately, there were no incidents during the ride and all message handling was of a routine nature.

Once again this year, a group of Girl Guides came and used our workshop facilities. The evening was organized by John Collins and the girls constructed a small one transistor FM transmitter. This evening was one of the girls' activities nights. It was interesting to see how easily they learnt to solder proficiently. John was assisted on the night by Keith VK3XKS and Rod VK3AYQ.

During November, we were given a presentation on electrical interference in cars by Bob Tait VK3XP. This was the same presentation that Bob had recently given at GippsTech. Bob had been our guest speaker on one other occasion and both times his talk was not only entertaining but also extremely educational. We were indeed fortunate to have Bob, as he had to make the journey to our club from Melbourne and then drive home again. The round trip duration is over two hours.

Our informal Christmas break-up was held at the new home of Neil Hancock VK3XNH and his wife Jenny. Neil and Jenny have a small country property about 20 minutes drive out of Geelong. Members and their families enjoyed a barbecue lunch in a very relaxed atmosphere. This was a pleasant way to finish the year. The club has a break from meetings over the Christmas New Year period until normal meetings resume in mid January. The club meets at 237a High St., Belmont, Geelong, on Thursday evenings at 2000 local time. Visitors are always welcome.

VK6

VK6 QSL Bureau

Following the previous 2 years' survey of the overall bureau activities, here are the 2006 figures added to those of 2004/2005. With the propagation in the doldrums, QSLing activity is at a low point. If it were not for the big world wide contests, the QSL card count would no doubt be very low.

INWARDS 2004, 11798 cards; 2005, 11170 cards; 2006, 10441 cards

OUTWARDS 2004, 6356 cards; 2005, 3430 cards; 2006, 3661 cards

The following is a synopsis of the incoming QSL cards to the VK6 bureau. Listing in some order is the country by prefix, number of deliveries for 2006, and the numbers of cards received.

4X/1/88...9A/1/360...9K2/1/

3..9V1/2/27...BY/1/7...CT/1/160...DL/3/1545...ER/1/55...G/2/211...HA/1/62...HB9/1/130...HL/1/495...I/3/1108...JA/7/1405...K/W/4/665...LY/1/38...LZ/1/35...OE/1/50...OH/1/260...OK/2/465...ON/PA/4/410...OZ/2/88...S5/1/191...SM/1/196...SP/1/335...TA/1/9...UA/4/1156...UR/1/596...VE/3/163...VR/2/17...YL/1/31...XE/1/17.

There were other very small deliveries from individual amateurs who bypassed their bureau.

Some cards arrived from a bureau that was the first delivery for three years, and many others were two years old. Also remember that the bureau would have been collecting the cards for some considerable time before despatching the packet.

The Sunspot Numbers chart, as published in AR magazine, indicates that the curve is now near the bottom of the cycle and from 2007 should gradually rise (WE HOPE). It will be interesting to follow the curve and relate it to QSLing activity. Will it follow the curve?

With the increase in the number of amateurs via the Foundation licence and the subsequent upgrades, the bureaux will see an increase in QSL activity?

It is an unfortunate fact that some amateurs are not WIA members and many cards arriving into the bureaux are left unclaimed. From the experience of the VK6 Bureau manager, approximately one third of the cards are for non-members.

**73 Neil VK6NE,
VK6 QSL Bureau Manager.**

VK5

Adelaide Hills Amateur Radio Society

Mid-November saw the AHARS Buy and Sell – the time and place where amateurs from Adelaide and the surrounding areas come to meet each other, and we hope, to find some bargains.

There were several traders with new equipment as well as many tables of “my junk is your treasure”. There were two door prizes, so two people went home with unexpected goodies.

Darcy VK5RJ, the real ‘old-timer’ featured in the December issue of AR, was there with a box in his hand (his XYL had threatened dire consequences if he bought anything, but he must have been prepared to face those!) and new Foundation licensees (new-timers?) too numerous to count had boxes and bags of goodies, too.

The queue outside before we started was as long as ever and the hall was crowded, but no-one complained.

AHARS also had a successful Christmas Dinner on December 6th and will have a Club Barbecue in the middle of January.

After that, we get back to normal with meetings at the Belair Community Hall on the third Thursday of each month. Meetings start at 7.30 pm officially but there are usually people around before that. The speakers are heard first. There are usually some odds and ends on a table at the back of the hall. These are available for whatever you like to give to the Treasurer, as gifts to the club.

All lectures are filmed and copies are available on DVD on application.

Visitors are always welcome. Please contact the President Jim VK5NB or look on the website for more information.

A Frequency Counter Project

In November 2006, AHARS had a construction night conducted by Graham VK5ZFZ.

These are always interesting and well run. Graham brings along all the components, explains what we are to do to make the device and wanders around making sure we have no problems.

He also usually has a testing station set up to use when the device is completed. The testing station this time was an old computer into which you plugged your

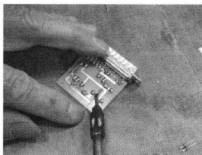
completed board, when, lo and behold, some numbers appeared on the screen to show that you were counting!!

The photos show the amount of interest the project generated. All participants, (over 60 of them) from the oldest to the youngest, or most recent, had their heads down and eyes focussed.

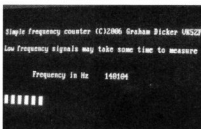
What is more, most of the completed counters did just that, they counted.

We were told that the counters could be put to use at home as well as just on this night.

Thanks for another interesting night, Graham.



The sample finished project



The results as they appeared on the screen of the computer



A picture of concentration - Sue VK5AYL



Sasi VK5SN and his YL, May VK5FMAY

**JOHN MOYLE
MEMORIAL FIELD DAY
17/18 MARCH**

Contests

Phil Smeaton VK2BAA

Contest Calendar for February 2007 – April 2007

Feb	3/4	Mexico Intl. RTTY Contest	(RTTY)
	10/11	CQWW RTTY WPX Contest	(RTTY)
	10	Asia-Pacific Sprint	(CW)
	10/11	RSGB 160 Metres Contest	(CW)
	17/18	ARRL Intl. DX Contest	(CW)
	23/24	Russian PSK WW Contest	(PSK31)
Mar	24/25	CQWW 160 Metres Contest	(SSB)
	3/4	ARRL Intl. DX Contest	(SSB)
	10/11	RSGB Commonwealth Contest	(CW)
	17/18	John Moyle Memorial Field Day	(CW/SSB/FM)
	17/19	BARTG RTTY Contest	(RTTY)
	17/18	Russian DX Contest	(CW/SSB)
April	24/25	CQWW WPX Contest	(SSB)
	7/8	Marconi Contest	(CW/SSB/RTTY)
	7/8	SP DX Contest	(CW/SSB)
	7/8	EA WW RTTY Contest	(RTTY)
	8	QRP Hours	(CW/PSK31/RTTY/SSB)
	14/15	Japan Intl. DX Contest	(CW)
	14/15	Yuri Gagarin Intl. Contest	(CW)
	21	Holyland DX Contest	(CW/SSB)
	21	TARA Skirmish Digital Prefix Contest	(PSK)
	21/22	YU DX Contest	(CW/SSB)
	28	Harry Angel Sprint	(CW/SSB)
	28/29	Helvetia Contest	(CW/SSB)
	28/29	SP DX RTTY Contest	(RTTY)

A somewhat belated Happy New Year to all for 2007.

Stairway to Ham Heaven

This isn't a tribute to Led Zeppelin. It's not an entrance facility to the final resting place for deceased porcine and it's definitely not the name for a non-Kosher butcher's shop either! The title of Ham Heaven has been proudly bestowed by the Northern Corridor Radio Group on their premises located in Whiteman Park, Perth.

Having had the privilege of visiting the group in November for the 2006 CQWW CW contest using the call sign VK2BAA/6, I'd say that this is highly appropriate nomenclature for the venue,

as the group members have been busily putting together a set-up which falls very neatly into said category. But first, a bit of history on the group:

The Northern Corridor Radio Group was formed 20 years ago by an enthusiastic group of amateur radio operators, located in the expanding residential northern corridor of Perth. There were no clubs or premises that would satisfy the local amateurs' aspirations to be found anywhere in this area at that time, but the locals craved premises in which to socialise, hold meetings and have an operational club radio station. Anyone was welcome to join the group, which had membership with interests covering many aspects of amateur radio's broad church of topics. At that time, a local college was

conducting amateur radio courses and was sympathetic to the group's request for a room for two nights a month for meetings and discussion. For many years the group was happily accommodated in the college and the operation of the station was enhanced by the erection of a 20 m mast within the college grounds. With the group conducting Amateur Radio Exams in a lecture room of the college, this symbiotic arrangement continued for many years up until the college was sold a few years ago and the group had to vacate the premises.

The search for another suitable location proved fruitless for almost two years, but then a contact was made with a local Pony Club which had a lease as part of the Equestrian Centre at Whiteman Park

in Perth. Negotiations took place and two years later, the NCRG has almost completed the project.

And what a project it has turned out to be. The members have managed to build a new club venue housing meeting areas, radio operating rooms, a kitchen, workshop, office and a storage room. Even a parking area for 25 vehicles, along with a water supply, power and fencing has been installed.

The ultimate driving force was a desire to be remote from any residential areas so as to have no possibility of causing domestic radio or TV interference problems and have no restrictions on the building of radio masts. Any work carried out requiring a licensed person was performed by a club member holding the required qualifications – saving a fortune in the process!

Ham Heaven features one self supporting mast, a tapered steel mast of 20 metres and two windmill stands, 20 metres and 8 metres high. Radio rooms 1 and 2 are painted and carpeted, lighting provided, power points installed and each room has a split unit A/C unit along with the all-essential antenna and rotator cables in place.

After all this hard work and effort, the group now has an almost fully functional club house. Meetings take place twice a month and the Sunday morning working bees and socialising have strengthened the group membership. The VK6 radio relay broadcast of the Wireless Institute's News now takes place from the group's station, using the callsign of VK6ANC.

Members often operate the radio equipment and enjoy aspects of Amateur Radio which may be denied at home because of Council restrictions on antennas or supports – and even neighbour issues for perceived visual or television reception reasons.

The obvious question that you might be asking yourself at this point is "How on earth can they afford all this hardware? Are they all rich?" The answer is "No"; they're not millionaires and they don't have a 'Sugar Daddy' wealthy benefactor either. The group have had a modicum of luck in making the right contact at the right time and a large helping of common sense in getting their act together. As a group, they spend many hours working at a weekend on various projects and use their networking skills to acquire mate's rates for materials and labour. They are a

prime example of what can be achieved when like-minded people group together and pull in the same direction.

The reason I've featured the group in this column is quite simple. The group participates in both international and interstate Radio Contests and often plays host to visiting amateurs such as myself. Bernd VK2IA operated in the 2006 CQ WPX CW Contest from the group shack using the callsign VK6AA, for example. The group has far-reaching aspirations in this direction, with thoughts turning to Multi-Multi (multiple operators using simultaneous multiple transmitters) type of configurations to enable VK to be represented in this category in international contests such as CQWW, with consummate ease. The NCRG already have plans for a further tower and have embarked on a directional antenna system for LF. There have previously been successful ad-hoc groups in this category (a team from VK entered CQWW SSB in 2006 in the M/M section – very successfully) but I'm not aware of any stations utilising facilities such as this of a permanent nature within this category, with plans for further expansion. Maybe you know better and can let me know? I'd be delighted to feature similar contest groups in AR.

From first-hand experience, and if you find yourself in the general area, I can recommend that you make contact via the group website <http://www.ncrg.org.au> and arrange a visit. I'm sure that you won't be disappointed. As an aside, if you have a spare beer fridge then please get in touch with the group, as theirs shuffled off this mortal coil during the November contest, no doubt due in part to the vast quantity of stubbies I loaded into it. As all guest operators should do, I made a donation to the group funds upon my departure to cover electricity etc – but the cash might need to go towards a new fridge! Vale fridge.

Spring VHF-UHF Field Day 2006 Results

The results and write-up for the Spring Field Day are published in this month's AR. It's great to see a good turn-out for the contest, with some impromptu operations of some bands reaping rewards for the brave and some increased activity arising in various areas of VK. The Summer Field Day usually attracts even more onto the

bands, so it all bodes well for summer – unless of course the occasion is spoiled by fires. Why not have a go next year, as either single or multiple operator? See if a few others at the local club fancy submitting an entry – the contest manager John VK3KWA would be delighted to hear from you.

Additional BERU information – The VP8GQ Trophy

Building on the BERU/Commonwealth Contest information published last month, an additional award has been announced. With the intention of stimulating some new interest in the Commonwealth Contest, the VP8GQ Trophy will be presented to the highest-placed non-UK station (who has not won the trophy in the preceding two years) in the 12-hour category, regardless of section, Open or Restricted. This award takes the form of an attractive wood mounted plaque and will be retained by the winners. This trophy has been made available through the generosity of Peter Hobbs G3LET.

Commonwealth Traveller Award

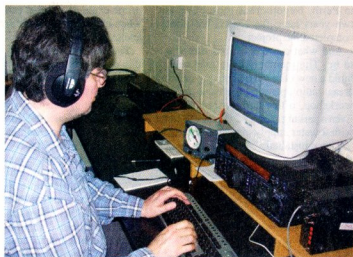
A special "Commonwealth Traveller" certificate will be awarded to the highest-scoring entrant who operates from a Commonwealth Call Area which was not active in the previous year's (2006) event. At the discretion of the RSGB HF Contest Committee, additional "Commonwealth Traveller" certificates may be awarded to entrants from especially inaccessible Call Areas.

Century Club Special 70th Award

This new award is a special promotion to coincide with the 70th Anniversary of the Contest and the inaugural Commonwealth Team Competition. It is available for 2007 only. It may be claimed by any licensed radio amateur having contacted a minimum of 70 (Seventy) Commonwealth Call Areas on the current list between 0001 UTC 1st January 2007 and 2359 UTC 31st December 2007.

Full details of these awards and a useful checklist are available at www.beru.org.uk, or contact the organisers via g3pjt@btinternet.com.

continued next page



Your humble scribe during the 2006 CQWW CW contest at NCRG
Photo: VK6HZ

(Left) The Northern Corridor Radio Group Clubhouse, showing the tribander at 20 metres and the all-essential BBQ area. Photo: VK6NE

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John Moyle Memorial Field Day

The John Moyle Memorial Field Day is due next month, so why not take a leaf out of the Westlakes Club's book and have a go - if the fires permit of course.

Westlakes won the HF/Open section last year as VK2ATZ/P and made a weekend of it by setting-up their equipment near Woodberry, near Maitland. The club gathered together sufficient equipment to make the entry and by their own

admission, a huge amount of expensive hardware is not required to be competitive and win the contest. Tenacity, skill and operator BIC (Bum In Chair) is what's required to enable an excellent placing and to have fun with a group of like-minded friends. Jessica, VK2FJES took part in the contest, helping to amass the winning score for the Team. I hope you

enjoyed the contest Jessica and will be back for more contest fun soon.

If you have any contest related material for inclusion within the column, topics that you'd like covered or even some experiences and pictures you'd like to share, then please feel free to get in touch via vk2baa@wia.org.au. See you on the bands.

73 de VK2BAA Phil Smeaton



Westlakes Club VK2ATZ/P HF/Open section winners: Allan VK2JED, John VK2FJKD and Paul VK2BPL in the heat of battle during John Moyle Contest Photo: VK2BPL



Jessica VK2FJES under the guidance of Allan VK2JED, operate Westlakes Club station VK2ATZ/P during John Moyle - showing the Team how it's done! Photo: VK2BPL



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Picture 5: Westlakes Club VK2ATZ/P HF/Open section winners, station equipment. Photo: VK2BPL

CQ WW 160 Metre CW Contest 200 Results

(VKs only/Call/Score)

VK6DXI	3,587
VK3IO	2,240

The Commonwealth Contest 2007 – the Australian team needs you!

By Steve Ireland VK6VZ

The RSGB's Commonwealth Contest is one of the oldest radio contests in existence, having been first run back in 1931 when it was known as "British Empire Radio Week" and lasted for six days!

All those countries that were part of the great family of the British Empire – including Australia, of course – were invited to participate. While the Sun set several decades ago on the Empire and the colonies are long gone, strong ties still exist between the countries that once were all coloured pink in atlases, as a sign of their being ruled by the Queen or King of England.

British Empire Radio Week metamorphosed into the 24-hour

British Empire Radio Union or BERU (pronounced berroo) contest in 1935 [1], with the objective of linking all those having an interest in amateur radio within the Empire. In 1976, BERU morphed into the Commonwealth Contest, substituting the Commonwealth for British Empire, but with the spirit of the original objective intact.

It seems to me that this spiritual objective survives to this day – and is one of the main attractions of the Commonwealth Contest for me – which sits alongside the Australian Remembrance Day Contest as my favourite radio events.

As an ardent Australian republican, I find it is quite amusing to have developed such a strong affection for an event

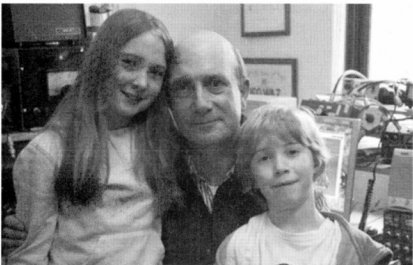
that some regard as a sort of colonial hangover. The reason is that for me the Commonwealth Contest stands for everything that is good about being part of a big family – friendly exchanges, mateship and a fierce rivalry that never tips over into antagonism.

Once you have taken part in a Commonwealth Contest – in which entrants use Morse code – you seem to become part of the family. The next year, some of the regular operators greet you by name – a pretty weird event in the breakneck speed world of CW contests – and the year after, and the year after that, more and more operators seem know who you are and offer a greeting.

The event also has something in it of the game of cricket – a contest of strategy, rather than just brute force (high power and huge antennas). Sure you can sit on a frequency and blast away in a manner akin to Adam Gilchrist, but you aren't going to place very high unless you engage the grey matter and do some elegant Ricky Ponting-esque bonus-point chasing and band changes.

There is a saying that in order to know where you are going, you have to know where you have come from – and in the case of Australia, Canada, New Zealand, the West Indies, India and Pakistan, we all owe our existence (rightly or wrongly) to the Commonwealth. Whatever Aussies, Kiwis or Canucks or other people who live in a Commonwealth member country feel about the past, we can do battle with the mother/father country at cricket or in the Commonwealth Contest – and give 'em a good friendly hiding if we can.

This year, the Commonwealth Contest 2007, which takes place on 10/11 March,



Picture 6: Steve Ireland VK6VZ plus his daughter, Hannah and son, Sam. Behind VK6VZ can be seen the Panda Cub transmitter used by famous Commonwealth Contester, the late Derek Ritson G5RI

has a new team section, which should give a whole new twist to these traditional rivalries. The format of this team contest will follow loosely that of the 2007 Cricket World Cup, which is being held around the same time, with teams from the United Kingdom, Australia, New Zealand, Canada and the Indian sub-continent. Hopefully, winning the team section will become the radio equivalent of taking home the World Cup cricket trophy.

Full rules for the Commonwealth Contest 2007 can be found at: <http://www.contesting.co.uk/hfcc/rules/rberu.shtml>

I (VK6VZ) have been given the job of coordinating the Australian team entry and, on the first day of the Ashes, passed on the names and call signs of the 14-person squad to take part in the 2007 event to the RSGB. Our squad consists of:

1. Les VK4BUI
2. David VK2NU
3. John VK4EMM
4. Alan VK8AV*
5. Barry VK2BJ
6. Mike VK6HD
7. Russ VK4XA
8. Kevin VK6LW
9. Phil VK2BAA
10. George VK4XY
11. Bernd VK2IA*
12. Rob VK6HG
13. Alan VK6BN
14. Steve VK6VZ

The asterisked members of our squad are those who may not be able to take part owing to personal circumstances, but hope to be available. Rob VK6HG has offered to be our "12th man", as he has only a few low antennas, lives behind a big hill and runs QRP, but we are delighted to have his company and great Aussie spirit.

As with the current Australian cricket side, we are an interesting blend of experience and even more experience and are quite happy to be known as "Dad's Army". Our team motto is: "Too old, too slow, too good."

In order to make the best possible score, it is important for each member of the Australian squad to work as many "bonus stations" as possible. Each Australian state counts as a separate call area for the contest on each band, and the first three contacts we make with each Australian state other than our own on each band each earns us a vital twenty bonus points.

What this rather confusing statement means in practice for a VK6 station is that each of the first three contacts with VK5 on each band is worth 60 bonus points. If you multiply this by five bands, as the contest covers 80, 40, 20, 15 and 10 m, this means that contacts with the state next door alone can be worth 300 points – a huge amount in the Commonwealth Contest.

On this basis, if as many Australian amateurs as possible can get on in the Commonwealth Contest and help the team out by working them on as many of the HF bands as possible, that would help us to beat the Poms, Kiwis and Canucks, and all those others.

Please help us to win the Commonwealth Team Contest. You might also have a lot of fun too!

For those who would like to enter, there is a brilliant free software program called SDC, which has been written by Paul EI5DI especially for the Commonwealth Contest. This runs under Windows and

can be downloaded from: <http://www.ei5di.com/sd/sdcsetup.exe>

See you in the Commonwealth Contest 2007, I hope – and "Go Australia" in the Cricket World Cup!

Websites

Commonwealth Contest rules at: <http://www.contesting.co.uk/hfcc/rules/rberu.shtml>

Call areas for the contest are listed at: <http://www.contesting.co.uk/hfcc/information/codes.shtml>

There is some general Commonwealth Contest information at: <http://www.beru.org.uk>.

References

- [1] Reflections in a Rosebowl – a history of the Commonwealth Contest from 1931 to 1996. By Bob Whelan, G3PJT. Published by Lambda Research, 36 Green End, Comberton, Cambridge CB3 7DY.

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Spring VHF-UHF Field Day 2006: Results

Contest manager: John Martin VK3KWA

Call	Name	Location	50	144	432	1296	2.4 GHz	3.4 GHz	5.7 GHz	10 GHz	
Section A: Single Operator, 24 Hours											
VK4OE	Doug Friend	QG61, 62, 63	76	483	550	720	330	-	-	-	1609
VK1DA	Andrew Davis	QF44	45	498	565	-	-	-	-	-	1108
VK4JMC	John McPherson	QG62	50	444	550	-	-	-	-	-	1044
VK1PWE	Scott Whitten	QF44	53	501	215	-	-	-	-	-	769
VK4DMC	Dale McCarthy	QH32	41	294	420	-	-	-	-	-	755
VK2EAH	Andy Hood	QF57	-	180	170	-	-	-	-	-	350
VK1DSH	Dale Hughes	QF44	-	117	-	-	-	-	-	-	117

Section B: Single Operator, 8 Hours

VK3IH	Paul Stampton	QF21, 30, 31	44	351	430	-	-	-	-	-	825
VK4DMC	Dale McCarthy	QH32	35	192	235	-	-	-	-	-	462
VK2GG	Dan Joyce	QF56	-	-	-	-	210	-	210	-	420
VK2TRF	Jack Swart	QF56	-	-	-	-	210	-	210	-	420
VK5ZUC	Andrew Russell	PF94	-	183	230	-	-	-	-	-	413
VK2EAH	Andy Hood	QF57	-	144	170	-	-	-	-	-	314
VK5UE	Colwyn Low	PF95	21	120	-	161	-	-	-	-	302

Section C: Multi Operator, 24 Hours

VK3UHF	(1)	QF21	81	567	820	736	560	-	-	220	2984
VK5OM	(2)	QF03	70	483	775	776	-	-	-	-	2104
VK4WAT	Tableland REC (3)	QH22	131	465	585	168	-	-	-	220	1569
VK2AES	(4)	QF45	50	597	550	304	-	-	-	-	1501
VK1BL	(5)	QF44	78	603	620	-	-	-	-	-	1301
VK3JTM	(6)	QF12	23	246	405	368	-	-	-	-	1042
VK5ZUC	(7)	PF94, 95	-	291	295	168	-	-	-	-	754

Section D: Multi Operator, 8 Hours

VK3IDL	(8)	QF12	34	183	295	448	320	-	-	-	1280
VK3JTM	(6)	QF12	23	246	405	368	-	-	-	-	1042
VK5ZUC	(7)	PF94, 95	-	198	215	168	-	-	-	-	581
VK3FRC FAMPARC	(9)	QF21	-	237	330	-	-	-	-	-	567

Section E: Home Station, 24 Hours

VK3AAK	Michael Coleman	QF21	55	468	570	416	-	-	-	-	1509
VK3YLV	David Timms	QF13	48	297	430	288	-	-	-	-	1063
VK4TJ	John Kirk	QG52	37	258	335	256	-	-	-	-	886
VK2DAG	Matt Hetherington	QF56	66	342	465	-	-	-	-	-	873
VK2KOL	Colin Hadland	QF56	-	393	455	-	-	-	-	-	848
VK4FNQ	John Goldfinch	QG39	56	381	340	-	-	-	-	-	777
VK3UDX	Geoff Beadle	QF22	23	174	230	184	-	-	-	-	611
VK4AQ	Ross Anderson	QH32	68	228	240	-	-	-	-	-	536
VK1WJ	Waldis Jirgens	QF44	50	177	250	-	-	-	-	-	477
VK2EI	Neil Sandford	QF68	-	249	105	-	-	-	-	-	354
VK3AJR	Andre Jones	QF21	-	132	125	-	-	-	-	-	257

(1) Chas. Gnaccarini VK3PY, David Learnmonth VK3QM.

(2) Jim Bywaters VK5OM, William Day VK3LY, Bruce Farmers VK3AQX.

(3) Tableland Radio & Electronics Club: John Roberts VK4TL, Dave West VK4ADW, Ulf Larsen VK4TUL, Trevor Gregory VK4ZFC, Jeff Cochrane VK4BOF.

(4) Andy Sayers VK2AES, Russell Manning VK1JRM, Sean Barwick (SWL).

(5) Ted Garnett VK1BL, Greg Parkhurst VK1AL.

(6) Tim Morgan VK3JTM, Dylan Cator VK3JWC.

(7) Andrew Russell VK5ZUC, David Clegg VK5AMK.

(8) Ian Lloyd VK3IDL, Ian McDonald VK3AXH.

(9) Frankston & Mornington Peninsula ARC: Roy Seabridge VK3GB, Gerard Werner VK3GER, Ed Parsons VK3GD, Kim Day VK3FDXX, Brian Rich VK3VBJ.

Comments

One interesting feature of the Field Day was the large number of entrants who haven't sent in a log before. The patterns of activity were different too – some entrants reported less activity than usual, while others reported more. It seems that the main hot spots of activity this time were south-west VK3, VK1 and surrounding areas, and also northern VK4. There were no reports of unusually good propagation.

Not long before the Field Day, I made a request for entrants to avoid DX calling frequencies where possible and make use of the recommended contest frequency (.150 on each band) instead. It was disappointing to see a fair few 59 contacts logged on frequencies like 144.100. I don't want to totally prohibit the use of such frequencies unless necessary, but strings of 59 contacts on frequencies like 144.100 aren't in the spirit of the rules!

Some comments from the logs:

This VHF field day was different from past contests because, for the first time in years, we had four field stations in

the VK1 area plus some home stations. This increased the activity level and made the weekend much more rewarding – it's much more fun when there are plenty of contacts to be had. Radio conditions to the southwest (generally the Melbourne direction from Canberra) were disappointing ... To partly make up for that we had some excellent signals in from north east, with many contacts into Sydney, the coastal areas north and south of Sydney and contacts further north to Forster on 144 and 432 which were very welcome. – VK1DA

I was surprised by the level of activity here around VK1. Also for the first time there was some SSB activity on 52 MHz, probably sparked by one field station's inability to use the lower band segment. – VK1WJ

It provided an impetus for me to get an antenna operational on 23 cm, which resulted in 12 contacts, 3 grid squares and over 25% of my final tally. – VK3AAK

I was pleasantly surprised by the level of support semi-locally for this contest. At the last minute, I got a Yagi half way up the tower for 1296, which resulted in some points and a couple of new grids for me on that band. – VK4TJ

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John Moyle Memorial Field Day Contest Rules 2007

Presented by Denis Johnstone (VK4AIG/VK3ZUX)

17 – 18 March, 2007

0100 UTC Sat – 0059 Sun

I wish all entrants good luck, and look forward to hearing you on air during the contest!

N.B. new email address: jmfd2007@wia.org.au and/or check out latest info at <http://www.wia.org.au/contests/>.

Overview

1. The aim is to encourage and provide familiarisation with portable operation, and provide training for emergency situations. The rules are therefore designed to encourage field operation.
2. The contest takes place on the 3rd full weekend in March each year, and runs from 0100 UTC Saturday to 0059 UTC Sunday, 17-18 March 2007.
3. The contest is open to all VK, ZL and P2 stations. Other stations are welcome to participate, but can only claim points for contacts with VK, ZL and P2 stations.
4. Single operator portable entries shall consist of ONE choice from each of the following (e.g. 6 hour, portable, phone, VHF/UHF):
 - a 24 or 6 hour;
 - b Phone, CW, or All modes;
 - c HF, VHF/UHF or All Bands.
5. Multi-operator portable entries shall consist of ONE choice from each of the following (e.g. 24 hour, portable, phone, VHF/UHF):
 - a 24 or 6 hour;
 - b Phone, CW, or All modes;
 - c HF, VHF/UHF or All Bands.
6. Home and SWL single operator entries may be either, 24 hour or 6 hours, all modes, all bands.

Scoring

7. Portable HF stations shall score 2 points per QSO.
8. Portable stations shall score the following on 6 m:

a 0-49 km	2 points per QSO
b 50-99 km	10 points per QSO;
c 100-149 km	20 points per QSO
d 150-299 km	30 points per QSO
e 300-499 km	50 points per QSO
f 500 km and greater	2 points per QSO

9. Portable stations shall score the following on 144 MHz and higher:

a 0 to 49 km	2 points per QSO
b 50 to 99 km	10 points per QSO
c 100 to 149 km	20 points per QSO
d 150 to 299 km	30 points per QSO
e 300 km and greater	50 points per QSO

10. For each VHF/UHF QSO where more than 2 points is claimed, either the latitude and longitude of the station contacted or other satisfactory proof of distance such as the 6-figure Maidenhead Locator must be supplied.

11. Home stations shall score:

- a Two points per QSO with each portable station.
- b One point per QSO with other home stations.

Log Submission

12. For each contact: UTC time, frequency, station worked, RST/serial numbers sent / received and claimed score. (VHF and above location of other station and distance showing the Lat Long or Maidenhead Locator to 6 figures for the station worked.)
13. Logs must be accompanied by a summary sheet showing: call sign, name, mailing address, section entered, number of contacts, claimed score, location of the station during the contest, and equipment used, and a signed declaration stating "I hereby declare that this station was operated in accordance with the rules and spirit of the contest and that the contest manager's decision will be accepted as final". For multi-

operator stations, the names and call signs (legible) of all operators must be listed.

14. Paper logs may be posted to "John Moyle Contest Manager, 27 Laguna Ave, Kirwan 4817 Qld". Alternatively, logs may be emailed to jmfd2007@wia.org.au, vk3zux@wia.org.au or to vk3zux@hotmail.com or snail mailed via the WIA Contest Manager JMMFD, P.O. Box 2175 Caulfield Junction, VIC 3161. The following formats are acceptable: EXCEL or Microsoft Word, ASCII text or electronic log programs such as VK Contest Log (VKCL). Logs sent by disc or e-mail must include a summary sheet and declaration, but the operator's name (legible) is acceptable in lieu of a signature. Logs must be postmarked no later than 30 April 2007.

Certificates and Trophy

15. At the discretion of the Contest Manager, certificates will be awarded to the winners of each portable section. Additional certificates may be awarded where operation merits it. Note that entrants in a 24 hour section are ineligible for awards in a 6 hour section.
16. The Australian portable station, CW section, with the highest CW score will be awarded the President's Cup, a perpetual trophy held at the Executive Office, and will receive an individually inscribed wall plaque as permanent recognition.

Disqualification

17. General WIA contest disqualification criteria, as published in Amateur Radio from time to time, apply to entries in this contest. Logs which are illegible or excessively untidy are also liable to be disqualified.

Definitions

- 18 A portable station comprises field equipment operating from a power source, e.g. batteries, portable generator, solar power, wind power, independent of any permanent facilities which is the normal location of any amateur station.
- 19 All equipment comprising the portable station must be located within an 800 m diameter circle.
- 20 A single operator station is where one person performs all operating, logging, and spotting functions.
- 21 A single operator may only use a call-sign of which he/she is the official holder. A single operator may not use a call-sign belonging to any group, club or organisation for which he/she is a member or sponsor except as part of a multi-operator entry.
- 22 A multi-operator station is where more than one person operates, checks for duplicates, keeps the log, performs spotting, etc.
- 23 A multi-operator station may use only one call-sign during the contest.
- 24 Multi-operator stations may only use one transmitter on each band at any one time, regardless of the mode in use.
- 25 Multi-operator stations must use a separate log for each band.
- 26 Logs submitted electronically can use a separate Excel worksheet for each band linked to a summary sheet. A typical example is shown at <http://www.wia.org.au/contests/> which can be copied and adapted for the individual use of either single or multi-operators stations.
- 27 A station operated by a club, group, or organisation will be considered to be multi-operator by default.
- 28 None of the portable field equipment may be erected on the site earlier than 28 hours before the beginning of the contest.
- 29 Single operator stations may receive moderate assistance prior to and during the contest, except for operating, logging and spotting. The practice of clubs or groups providing massive logistical support to a single operator is, however, totally against the spirit of the contest. Offenders will be disqualified, and at the discretion of the manager, may be banned from further participation

- in the contest for a period of up to 3 years.
- 30 Phone includes SSB, AM and FM.
- 31 CW includes CW, RTTY, and packet.
- 32 It is not expected that any other modes will be used in the contest, but if they are, they shall be classed as CW.
- 33 All amateur bands may be used except 10, 18 and 24 MHz. VHF/UHF means all amateur bands above 30 MHz. Note: On 50 MHz, the region below 50.150 has been declared a contest free zone, and contest CQs and exchanges may only take place above this frequency. Stations violating this rule will be disqualified.
- 34 Cross-band, cross-mode and contacts made via repeaters or satellites are not permitted for contest credit. However, repeaters may be used to arrange a contact on another frequency where a repeater is not used for the contact.
- 35 Stations may make repeat contacts and claim full points for each one. For this purpose, the contest is divided into eight consecutive three-hour blocks: 0100-0359, 0400-0659, 0700-0959, 1000-1259, 1300-1559, 1600-1859, 1900-2159, 2200-0059 UTC. If you work a station at 0359 UTC, a repeat contact may be made after the start of a new block providing they are not consecutive,

- or are separated by at least five minutes, since the previous valid contact with that station on the same band and mode.
- 36 Stations must exchange ciphers comprising RS(T) plus a 3 digit number commencing at 001 and incrementing by one for each contact.
- 37 Portable stations shall add the letter "P" to their own cipher, e.g. 59001P.
- 38 Multi-operator stations are to commence numbering on each band with 001.
- 39 Receiving stations must record the ciphers sent by both stations being logged. QSO points will be on the same basis as for Home Stations, unless the receiving station is portable.
- 40 The practice of commencing operation and later selecting the most profitable operational period within the allocated contest times is not in the spirit of the contest, and shall result in disqualification. The period of operation commences with the first contact on any band or mode, and finishes either 6 or 24 hours later.

If anyone wishes to contact me privately to discuss rules, my home phone number is (07) 4723 4229, and my snail mail and email address is as shown in the Log Submission section above.

Denis Johnstone (VK4AIG/VK3ZUX)
ar

Thanks for contributions to the from page 19

- Estate Ron VK2ASJ courtesy of Wal Stuart.
- Estate Vince Nugent VK2ALZ courtesy of Mrs Frances Nugent.
- Estate Jim Swan VK2BQS courtesy of Mrs Helen Swan, (included QSL A5ITY from Bhutan).
- Additional QSLs from Jeff VK6AJ: Scotland DL6MHW/MM, IOTA 009, Aland Is. OH0NH, France F/DJ9RR. IOTA 064. Moldova ER2000A (millennium), ER50CE (50 years Council of Europe), German Club DM4E, Azores G300K/CU2, Australian Commonwealth Games AX3MCG and AX3GAMES.
- Jim Smith VK9NS on Norfolk Island. Some rare IOTA Europe. EU092 Scotland, EU088 and EU029 Denmark, EU070 France, EU060 Greece, EU083 Italy,

QSL collection continued

EU150 and EU 040 Portugal, EU160 Russia, EU179 and EU180 Ukraine. Jim is known world-wide through his numerous DXpeditions and has been a contributor for many years.

Mike VK6HD. Sweden Si6, SJ2, 8S4. Mexico 4B7 and 6F1. Latvia YL2000, YL85. Another top DX-er and contributor.

Austrian QSL Bureau, courtesy of Wolf OE1WHC for some rare prefixes. Sweden 8S6, SJ1, SJ2, Germany DP5, Belgium OO175, 75OMG, 7S6, San Marino T72. Spain AN2, Canary Islands EH8, France FQ2, HY2, TH6, TW7 and TW4. Malta 9H9, Italy 107, IS8 (new prefix; first time on the air), Canada VD5, VF6, XN2 is truly a prefix chaser's dream!

More acknowledgements next month.

ar

VHF/UHF - an expanding world

David Smith VK3HZ vk3hz@wia.org.au

Weak Signal

David Smith - VK3HZ

So far this summer, we've had one of the best VHF DX seasons for many years - some say 20 years. On the 2 m band, there have been good openings to ZL, VK6 to VK3 and from VK7 to the mainland far and wide (including VK6). The 2 m Sporadic E openings have been numerous, long-lasting and widespread with several contacts that appear to be double-hop. What more could we want!

Firstly, thank you to all those who sent me reports of their contacts. Unfortunately, there's been so much happening (not helped by the one month break for AR) that I have no hope of reporting it all without earning a stern reprimand (and slash of the red pen) from our illustrious editor. So, I'll try to summarise what's happened and give you the highlights.

On 19/11, 2 m opened from VK2's AWD, FZ and EAH to ZL3TY.

On 21/11, Norm VK7AC worked Colin VK5DK in Mt Gambier on 2 m, 70 cm and 23 cm with 5/9 signals on all bands.

On 23/11, 2 m again opened across to ZL.

On 24/11, Norm VK7AC worked into the Adelaide area making contact with (2 m) VK5ZLX 5/9+, VK5BC 5/9, VK5AKK5/9+, VK5OM 5/9, VK5ZK 5/9; (70 cm) VK5ZLX 5/9, VK5BC 5/6, VK5AKM 5/2, VK5ZK 5/9, VK5AKK 5/9. The highlight of the day was the 1009 km contact with Phil VK5AKK on 23 cm at 5/9 - a new VK7 23 cm distance record.

On the same day, Mark VK2EMA in central NSW also managed to work into Adelaide, to (2 m) VK5ZLX 5/9+, VK5BC 5/2, VK5ZK 5/9, VK5AKK 5/9; and (70 cm) VK5ZLX 5/9, VK5AKK 5/9, VK5ZK 5/9.

On 27/11, Wally VK6WG reports working (2 m) VK5NY 5/9+, VK5AKK 5/2, VK5ZAI 5/4, VK5BC 5/5, VK5DK 5/5 VK3AAK 5/1, VK3XPD 5/1 VK3TW; (70 cm) VK5NY 5/8. On 23 cm, Wally was heard by VK5BK. On 2 m, he was heard by VK7AC. The Mt Gambier VK5RSE beacon was audible all day.

On 28/11, between 0550Z and 0900Z, Wally reports hearing VK5RSE on 2 m, 70 cm and 23 cm and VK3RGI

(Gippsland) on 2m, 70 cm and 23 cm. Despite numerous calls on 144.1, no contacts were made. Huge signals from VK3 to VK7 - VK3PY to VK7AC S9+20 on 23 cm.

On 7/12, Brian VK5BC reports working VK4FNQ.

On 8/12, the Sporadic E openings started in earnest. Phil VK3YB worked ZL1IU 5/1. ZL1BT worked VK3VHF 5/8, VK3ZYC, VK3EK 5/8, VK3YB 5/1 (2616 km), and is heard several times by VK3NX on (very) sporadic E. Jim VK5OM with a very modest station (25 W to two stacked halos) worked VK4KAY and VK4BKP. VK5BC worked VK2DAG and VK2ZT.

On 9/12, probably the best contact of the season (so far) when Nick ZL1IU worked Garry VK5ZK and Peter VK5ZLX on 2 m - a distance of 3160 km. Gordon VK3ACC and Trevor VK3VG also both worked Nick. Both of them reported hearing both sides of the VK5/ZL contacts, leading to speculation that the mode of propagation was either double-hop Sporadic E or tropo-enhanced Sporadic E. Trevor reports that he tried 70 cm to Nick, but nothing was heard despite the S9+ signals on 2 m, backing up the theory that Sporadic E was involved, at least to central Victoria. This is the longest distance VK 2 m contact for many a year.

Continuing on the 9/12 (which was a very busy day), Glenn VK4TZL reports working VK7AC 5/9+40, VK5ZK, VK3ZQB 5/9, VK3XQ, VK3AKK, VK3CAT, VK3AMK, VK3DMW, VK3KAQ, VK3KAI and VK7AC again. Norm also worked VK4CP and VK4KK. Russell VK3ZQB reports that he gave up trying to watch TV as there were 3 Ch 2 stations competing for his viewing. On 2 m, he then worked VK4TZL 5/9, VK4WS 5/8, VK4ARN 5/9, VK4ZAA, VK4ARS 5/3, VK2FMB, VK2BA, VK2DVZ 5/9 and VK2FAD 5/9+ at Taree. Ross VK2DVZ reports working VK1, 2, 3, 4, 5, 7 and both islands of ZL. Steve VK2ZT reports the same spread of coverage, with 20 contacts and 22 on the 10/12. VK3VHF worked ZL1IU 5/5. Phil

VK4CDI reports working ZL1IU, then 7 VK3s and 1 VK7. David VK2BA reports that he was working VK6s on 6 m and, with the short skip, decided to try 2 m. The band opened strongly to VK3 and he worked 10 VK3s through the only pileup of interstate stations he has ever heard on 2 m. He also worked VK7AC 5/9 - all with his beam towards VK6.

Still on 9/12, Andy VK2AES reports working ZL1IU. He then contacted some Canberra stations and, as a result, Ian VK1BG and Rob VK1ZQR both had good contacts with Nick. This is possibly the first opening on 2 m from the VK1 area into ZL for a couple of decades.

On 10/12, tropo was the main form of propagation. On 2 m, ZL3TY worked 13 VK2s and 9 VK3s. VK5ZLX was also heard. Rhett VK3VHF worked ZL3TY 5/5 on 2 m and -23 on 70 cm JT65.

On 11/12, the tropo enhancement had moved and ZL3TY reports working 15 VK2s and 3 VK4s on 2 m. VK2FZ was worked on 70 cm.

On 16/12, Simon ZL1SWW reports working VK2FZ, VK2ARA and VK2BX on 2 m and heard "someone from the Dandenongs" (probably VK3KAQ).

On 22/12, another strong Sporadic E opening. Paul VK3DDU reports working 8 VK4 stations on 2 m. Colin VK5DK worked 7 VK4s, 2 VK2s and 2 VK3s. Steve VK2ZT reports 1 VK3, 3 VK4s, 6 VK5s, 2 ZL1s and 5 ZL3s (over 2 days). Rex VK7MO reports working VK4KDD, VK4WS, VK4ZBH, VK4APG, VK4ZAA, VK2YO, VK4ADM, VK4EME, VK5AKK, VK5EME, VK5UK, VK5ZBK and VK5ZK. Doug VK4OE reports working VK5BC, VK3KAQ and having a 15 min rag-chew with VK3PY at S9+. Then the skip shortened to VK2AYM (Albury). Then VK3DDU, VK5ZK, VK3DUT, VK3VHF, VK3AMK and VK3WN. After a break, he worked VK7AC, VK5ZAI, VK5DK and VK3ZQB. He also heard VK4TZL (Hervy Bay) work VK7ZIF near Hobart.

On 23/12, another spectacular contact occurred. At 0900Z, Cec VK6AO worked Joe VK7JG on 2 m, in a brief opening,

over a distance of 2977 km. This is a new VK6 and VK7 2 m distance record and, it is believed, the first 2 m contact between VK6 and VK7.

Still on 23/12 (and the same opening), Colin VK5DK worked VK6HK 5/3 and VK6AO 5/7 and heard VK6ADI 5/6. The opening only lasted about 30 mins and the VK6RPH 144.460 beacon was audible. VK7MO worked (2 m) ZL4LV, ZL4DK, ZL3TY, ZL3NW, ZL3OZ, ZL3AAU, ZL3AIC, ZI3MF and ZL3CU. Murray ZL3MH worked VK1BG and VK2KU on 2 m.

On 25/12, plenty of sleigh-enhancement early morning. Jeff VK8GF worked VK4ARN, VK4CP, VK4APG, VK4JMC, VK4ASB, VK4TJ and VK4AFL. The VK4RTT beacon was S9+ from 0045-0155Z.

On 26/12, Rob VK4TWR reports working VK2GKA 5/9, VK2BXT 5/8, VK3NX 5/3, VK3ACC 5/4, VK2EMA 5/9+, VK3AMK 5/9+, VK3AAK 5/9+, VK3XQ 5/5, VK3II 5/5, VK3BBB 5/9 and VK2KRR 5/5.

On 2/1/07, Neil VK2EI reports working VK4BOF 5/6, VK4FNQ 5/9, and VK4BEC 5/5.

On 4/1, several big E's openings

occurred. A dog pile built up on 2 m, although operation was reasonably orderly with most stations calling on 144.1 but announcing that they were listening on another frequency. Trouble was, quite often you would QSY and find the other frequency now in use! There were many QSOs between VK1, 2, 3, 4, 5 and 7 stations – too many to list. The opening lasted for about 4 hours. John VK4FNQ reports working 36 stations.

5/1 was a similar day. Ron VK3AFW reports that he observed 3 E's opening periods – 0030 to 0100Z, 0300 to 0540Z and 0905 to 0908Z. For the VK4s the opening was continuous from 0030 to past 0600Z. VK4 stations that were consistently heard in



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Melbourne included VK4TWR, VK4BKP, VK4BLK, VK4FLR and a Foundation License holder Tom VK4FTDX who seemed to be having a ball. Many other VK4s came and went as the enhancement moved around. Gordon VK3ACC on the Murray reports working 13 VK4 stations. Trevor VK3VG in central Victoria reports working VK1, 2, 3, 4, 5, 7 and 8 in the UTC day and had excellent back-scatter signals when beaming west, but no VK6. Steve VK2ZT reports working ZL3FV and VK8GF – both just over 2000 km in opposing directions from him.

So, it's been a very lively two months. Hopefully there's a lot more to come before the season ends.

Microwave

Colin VK5DK reports some interesting activity on the 24 GHz band:

Russell VK3ZQB at Port Fairy and Trevor VK5NC and myself in Mount Gambier have had our first contact on 24 GHz since we altered the feeds on our systems.

On the evening of November 19th, a check of the VK5RSE 1296.550 MHz beacon by Russell showed a very strong signal at 5x9+. I set up at my portable location on the edge of the crater of the Blue Lake and was able to hear the 10 GHz beacon, located temporarily at Russell's QTH, at 5x9. Russell then proceeded to his portable location in the sands dunes just outside Port Fairy – a distance of just over 200 km. A 5x9+ SSB contact was made on 10 GHz.

We set up the 24 GHz units and Russell transmitted a signal to me but nothing was heard. I then transmitted a signal back to Russell who found me about 40 kHz lower than he expected. After aligning our dishes, we had good 5x9 signals both ways. This is the best signal heard over this path on 24 GHz with very steady signals over the 30 minutes QSO.

Alan VK3XPD reports on some further activity:

On Tuesday, November 28th at 1010Z, the current National VK Record for 24 GHz was extended from 201 km to 230.05 km.

Russell VK3ZQB, operating from the summit of Mt Warnambool (east of Warnambool) worked Alan VK3XPD operating from Berwick in the eastern suburbs of Melbourne. Signal Reports were 5x5 both ways.

Our 10 GHz systems were initially used for determining bearings because

the "pointing" of our 24 GHz systems is extremely sharp/critical. Several other QSOs followed on from this initial record claim with signal reports up to 5x9.

An attempt was made over a longer path of circa 400 km to Colin VK5DK and Trevor VK5NC operating from a site near Mt Gambier. However, this proved unsuccessful. It was later found, when Russell and Alan tried again, that the propagation had collapsed. This phenomenon occurred within a matter of minutes and is usually the result of rising humidity, which attenuates 24 GHz signals heavily.

Station parameters are tripod-mounted 600 mm Dishes fed by transverters which develop a rather modest 500 milliwatts on 24048.1 MHz and 2 metre IFs.

The weather conditions prevailing at that time of our record attempt (2110 hours EDT) were fine and calm and coincided with some excellent propagation south into VK7 and west to VK6 on several days prior.

Spring Field Day

As I write this, Summer VHF/UHF Field Day is almost upon us. I received a few notes about the Spring Field Day that may be of interest.

It's good to see a bit of activity from the VK1 area, with several stations perched on the hilltops. Ted VK1BL reports:

What a fantastic weekend. Thank you to everyone who participated. VK1 and surrounding area saw quite a lot of activity, although things started pretty slowly on Saturday afternoon. It was great to have home stations coming up in support of people in the field, and the tropo duct on Saturday night up the coast was just great for those willing to stay up to 1am Sunday...

Greg VK1AI and I had a great time on Mt Coree (QF44iq). We'd planned to camp down in the forest, but the activity Saturday night kept us on the summit where we eventually slept under the stars after closing down at 1am Sunday. Rain woke us at around 3:30 am but we caught a few hours sleep cramped in the front of Greg's Range Rover until about 7 am...

Here's for even more fun on the Summer Field Day in January.

Doug VK4OE also had some fun:

I, as usual, had a great time operating five bands as a single operator during the recent Spring VHF/UHF Field Day event, but I particularly want to describe the best tropo QSO that I have experienced

during such a contest. Normally, good propagation seems to be reserved for times other than contests...

Early on the Sunday morning I set up my portable gear on Springbrook Mountain which is just inland from the Queensland Gold Coast, right on the NSW border (QG61PS) and at 2000 immediately made contact with some Brisbane stations. A weak signal coming from the North was evident behind those strong stations and it was a thrill to discover that it was John VK4FNQ in Charters Towers (QG39EX). The ensuing contact at 1148 km was a steady 5x1 to 5x2 without QSB over a few minutes, and very satisfying. Attenuating 70 cm was without success.

The weather chart showed a large, long and stable high pressure ridge in the right place to make this contact possible through enabling a coastal duct to form.

A point that interests me about this QSO was that Brisbane stations in elevated locations or with a good take-off to the North, those who can and do occasionally work North Queensland stations when there is a coastal inversion in place, were not hearing John at this time. Propagation at the Southern end was to the 1050 m elevated site where I happened to be.

Some other Queensland coastal paths that have been worked, e.g. Brisbane to Cairns and the Atherton Tableland area, are longer. However, for propagation to occur when operating portable is rather special!

Beacons

A short note from Doug VK4OE to advise that VK4RBB has commenced transmission on 432.440 MHz, 1296.440 MHz and 2403.440 MHz from its permanent location at Murrarie in Brisbane, QG62NM. Transmitter powers are 8 W, 9 W and 2 W respectively, and each antenna is horizontally polarised and omnidirectional. Reception reports from distant stations would be greatly appreciated to Doug at friends@squirrel.com.au.

The northern Tasmania 2 m beacon – VK7RAE – on 144.474 MHz has been put back into operation at a new site on Don Hill near Devonport (QE38DU). It is running 10 W to a Big Wheel antenna, and has been heard several times already in VK3. Thanks to Joe VK7JG and the others involved in the work.

Please send any Weak Signal reports to David VK3HZ at vk3hz@wia.org.au.

Digital DX Modes

Rex Moncur VK7MO

John VK4JMC joined the group and puts out a good signal on FSK441. Peter VK3SO is operational and getting his feet wet by listening in to the activity sessions held from 0700 to 0800 ESDT each Saturday and Sunday.

The procedure developed by the group for working more than one station at a time is working well and has advantages even when working one station in that other listeners can identify the transmitting station and, as it takes fewer characters, it will sometimes get through on a shorter ping. Thus it is suggested that this procedure be generally applied in VK-ZL even when working only one station at a time. An example of this procedure is as follows:

Message Sent	Station Transmitting
CQ VK2AWD	VK2AWD
VK2AWD/27 VK4CDI/37	VK3II
VK3II	
VK3II/R26 VK3AXH/38	VK2AWD
VK2AWD	
AWD/RRR VK4CDI/26 VK3II	VK3II
II/73 VK3AXH/38 VK2AWD	VK2AWD

There is a limit of 28 characters on the WSJT program which means it is not possible to work more than two stations at a time.

Around 18 November, a number of stations were testing the limits of FSK441

at the time of the Leonids meteor shower. While the Leonids did not produce more than a marginal increase in meteor pings, they did encourage activity. There were more burns than normal and the best burn recorded was of 88 seconds duration from VK4EME that was copied in VK1, VK3 and VK7 at the same time. A number of stations attempted QSOs over longer distances to ZL with the following results:

ZL4LV VK7MO 1862 km QSO
 ZL3TY VK7MO 1951 km 4 x QSO
 ZL3TY VK2EAH 2003 km Identifiable ping
 ZL3CU VK7MO 2045 km 2 x QSO
 ZL3TY VK1WJ 2077 km 2 x QSO
 ZL3TY VK3ZYC 2093 km Identifiable pings
 ZL3TY VK3VHF 2162 km Identifiable pings
 ZL3TY VK3HZ 2272 km Identifiable ping
 ZL1IU VK7MO 2431 km 4 x Identifiable pings in 4 hours
 ZL3TY VK4EME 2451 km Identifiable ping when VK4EME working VK1WJ

These results show the maximum distance QSO was 2077 km but that a few pings were seen out to as far as 2400 km.

The results support the view that there is a practical limit of just over 2000 km for meteor scatter.

There is strong evidence that meteor scatter can be extended beyond the practical limit of 2000 km by tropo-ducting, with pings copied last year by Gary VK5ZK and Peter VK5ZLX from Bob ZL3TY at around 2800 km. In order to explore this dual mode of propagation, Nick ZL1IU has been running tests with Rex VK7MO. They report that on both 11 and 26 December, when the Hepburn charts indicated ducting on Nick's side of the Tasman, QSOs were completed with ping rates of up to 60 per hour compared to less than one per hour under normal conditions. Thus it is worth watching for this dual mode of propagation whenever the Hepburn charts indicate the possibility of a tropo extension. While a tropo extension will generally not go over high mountains, the meteor scatter part of the path is well above mountains and would, for example, allow stations west of the Great Dividing Range to work into ZL. Similarly a duct on the VK side of the Tasman will allow ZLs on the other side of the New Zealand Alps to work extended paths into VK.

Please send any Digital DX Modes reports to Rex VK7MO at rmoncur@bigpond.net.au.

The Magic Band - 6 m DX

Brian Cleland VK5BC

After some good openings in October, the band continued to improve in November. By December, the sporadic E season was in full swing with openings on most days. Most operators consider the season as one of the best sporadic E in memory with high activity from all call areas. Typical of comments and a summary from a VK6 perspective are those I received in a message from Graham VK6RO:

"The December 2006 6 m sporadic E DX season was the best I have ever experienced in the 28 years I have been DXing on 6 m.

I use a quarter wave vertical at about 10 metres high and an old Kenwood TS 680s as my scanning setup. This TS 680s has been scanning every day for about 20 years. For QSOs, I have a 6 element log periodic.

This past season was outstanding for the

number of openings to indicators or actual QSO openings. The band was open to New Zealand for 1 day in November and 4 days in December, this is outstanding; I do not remember this number of ZL openings before.

Please see below some statistics from my log. I log every indicator as they show up.

November 2006 [number of openings in brackets]

Days open: 6
 Beacons heard: VK6RSX [4] VK5VF [1] VK8RAS [1]
 TV: 46.240 [1] 46.172 [2] 45.250 [1] 57.250 [3] 57.260 [1]
 Hams worked VK5BC AND VK7AC

December 2006

Number of days open to indicators or

hams: 25 This must be a record for my shack.

New Zealand QSO

Openings occurred the following 4 days,
 16th with ZL3AAU
 17th with ZL3NW, TY, MF and AAU.
 23rd with ZL2AA, DX, ZL3NW, DAC, ZL1CX and ZL3TY
 26th with ZL3TY

This number of QSO openings to ZL is virtually unheard of in OF77XX
 BEACONS: See below the number of openings to each beacon heard.
 VK6RSX (17), VK8RAS (9), VK5RBV (2), VK3RMV (6), VK5VF (7), VK7RAE (2), FK8SIX (1)

Video or audio indicators:

continued on page 53

DX - News & Views

John Bazley VK4OQ,

P.O. Box 7665, Toowoomba Mail Centre, QLD 4352.

Email: john.bazley@bigpond.com

New Year Greetings to everyone. Even now, we know that we have plenty of DX to look forward to in 2007! What is still uncertain though, is have we passed the Sunspot Minimum yet? If we have, then the experts will undoubtedly soon be telling us what to expect in the coming months and years. Hopefully, a major improvement in conditions, with the prospect of 10 metres opening up again as a major DX band. 10 metres is quite an exceptional band. When conditions are really good, it is super for DX, with really strong signals, even when they are QRP, and it is relatively easy to erect some form of directional array in even small lots.

I hope that all of you who needed the Lakshadweep Islands (VU7), as I did, succeeded in working them during their operation during December 2006. ARIS have done an excellent job in arranging for these Islands to be reactivated. If you missed the first operation then hopefully you will have managed to work the second operation that took place in the latter part of January 2007 which will have included the use of 30 metres.

What DXpeditions are being planned, apart from the ones that have yet to be announced - January: S.M.O.M. (1A4A), Bangladesh (S21XA), Lakshadweep Islands (VU7RG), Niger (SU5U), Djibouti (J20SA), Burkino-Faso (XT2C), Zanzibar Island (5H1Z); February: Moucha Island (J20M & J20), Montserrat (VP2M), Aves Island (YW0DX); March: Spratly Islands (9M4SDX), April: Agalega (3B6), Swains Island (N8S); September: St Brandon Islands (3B7C)?

I wonder if we will have any new entities activated in 2007?

The ARRL DXCC Desk has approved the following operations for DXCC credit: ZA/IK7JWX (Albania), July 10-30, 2006; 3V6T (Tunisia), July 5-15, October 22-31 and November 22-30, 2006; 3V7A (Tunisia), May 22-31, 2006; 9G5UR (Ghana), current operation effective September 22, 2006; 9M0/9M2TO (Spratly Islands), June 9-12, 2006; 9QINT (Democratic Republic of the Congo), the current operation effective from September 22, 2006; C9ITL (Mozambique), June 29-July 13, 2006; FO/F8UFT (Clipperton Island), March 1-31, 2005; OJ0LA (Market Reef),

September 9-15, 2006; ZL9BSJ (Auckland and Campbell Island), September 12, 2006. For more information, visit the DXCC Web page <http://www.arrrl.org/awards/dxcc/>.

The DXCC Award programme also has a "DXCC Frequently Asked Questions" that can answer most of the questions about the DXCC programme and can be found at <http://www.arrrl.org/awards/dxcc/faq/>.

While on the subject of DXCC, we are going to miss Wayne N7NG, who has run the DXCC Programme now for over 6 years and had driven the development of the LOTW programme.

I quote from a note issued by Wayne: *All in all, it's been a fun six and one-half years. The League has been a great place to work, and I'd do all but the last 22 months over again. I thank all of you around the World for your great support. In particular, I offer special thanks to our volunteers - advisory committee members, log checkers and advisors. I also urge all of you to support the ARRL financially. Be sure to tell them what you want, though - they don't always ask. I hope to regenerate an active interest in Ham Radio back in Wyoming. Maybe there'll be another DXpedition or two as well, and look for N7NG - Jackson Hole - to be an active Wyoming contributor to LOTW as long as it's in business.*

73, Wayne, N7NG

The Spratly Island DXpedition in March (9M4SDX) is going to be a big operation with a large group of operators from Japan, including at the time of going to press, JA1OCZ, JE1CKA, JF1PJK, JK1FNL, JR1AIB, JZ1VLY, JQ2GYU and JR7TEQ, and from Malaysia - 9M2CF, 9M2KT, 9M2TO, 9M2/JH3GCN and 9M8YY. They will be active from Layang Layang (AS-051) from the 10th March to the 19th March with four stations on all bands and modes. QSL via 9M2TO, direct or bureau. The web site for the expedition can be found at <http://island.geocities.jp/layang9m4sdx/>.

The Sovereign Military Order of Malta, 1A0.

Starting from January 2007, a new Amateur Radio Station license (1A4A) has been issued for the SMOM, The

Sovereign Military Order of Malta. The licence is held by SMOM, and its management is the responsibility of Giorgio IZ4AKS. The first activity from this station was from the 2nd January 2007 to the 8th January 2007, from the extraterritorial zone of the Magistral Villa on the Aventine Hill in Rome. The operators were IZ4AKS, IZ4DPV, I4UFH, IK4UPB and HV5PUL (IW0DJB). Activity covered all bands from 2 m to 160 m, SSB/CW/RTTY modes. Three stations were active at the same time. Special attention was made to DX areas, such as Japan, South America and the U.S. West Coast, particularly on the low HF bands of 30, 40, 80 and 160 metres.

The licence was granted for a special fundraising programme to support the worldwide relief activities of the Order of Malta. The Order follows its historic Hospitalier mission providing help to the needy and the sick.

1A4A (One Aid 4 Africa) first period of activity aimed to collect funds to build a school for young girls, as part of a support plan for the rebirth of Southern Sudan, coordinated by the Order of Malta, together with the Italian government.

QSL Manager: IZ4DPV Massimo Cortesi, P.O. BOX 24, 47100 FORLÌ CENTRO (FC) - ITALY.

We hear that S9SS is due to retire in February from his job as Manager of the VOA station on Sao Tome. He plans to retire to the Mountains in North Carolina. The QSO's for S9SS are downloaded on LOTW and for those requiring a paper QSL these are available from his Manager N4JR. Over the years he has been very active from Sao Tome.

XT2C operation was scheduled for January 6th to January 20th on all bands. QSLs should be sent direct to F9IE.

5H1Z planned to be active from January 18th to January 29th on 80 to 10 metres running 400watts to vertical antennas, CW and SSB. QSLs to be directed to F6AML.

VU7RG activity was planned from January 15th to January 25th, any further information is available on their website.

C6ARI A group of German amateur

radio operators activated the rare Elbow Cay – part of Cay Sal Bank (NA219) from January 3rd to January 9th. Their QSL manager is DL3OCH.

FR/F4ACQ Tibo is running 100 watts into an inverted V dipole. He is expecting to receive his FR5 call sign soon. Tibo will be staying on Reunion Island as a permanent resident. QSL information will be announced soon. His main activity will be on 20 metres SSB.

D2NX - JM1CAX, (ex JY9NX, VK9NX, YJ0NX, 3DA0NX), Koji, is now working in Angola and QRV as

D2NX. He is running an IC-756PRO and IC-PW1. QSL via JH7FQK

6W and J5 African trip by Sid DM2AYO, Mel DL6CT and Hans DL7CM, who will be active from Senegal and Guinea Bissau between the 3rd and 23rd March. They will operate CW, SSB, RTTY and PSK as 6W/DM2AYO, 6W/DL6CT and 6W/DL7CM (QSL via home calls, direct or bureau) 160-6 metres, and as J5UAR (QSL via DL7CM, direct or bureau). Further information on their trip can be found at <http://www.qsl.net/dl7cm/6W/6W.htm>

VP8 South Shetlands Sang DT8A reports he "will be now on the air with the call HL8KSJ, the original call sign for the King Sejong station".

Happy DXing.

Special thanks to the authors of *The Daily DX* (W3UR) and 425 Dx News (11JQJ) for information appearing in this month's DX News & Views.

For interested readers you can obtain from W3UR a free two week trial from www.dailydx.com.

ar

VHF-UHF _ an expanding world continued

46.172 (25), 57.260 (15), 57.250 (20), 46.240 (14), 45.240 (16), 45.250 (9), 45.260 (9), 50.740 (1) 50.750 (1) [not all recorded, too exciting trying to work ZL's to listen] 48.239.6 (1), 55.250 (1), 55.250.1 (2), 55.260.5 (1), 57.750 (1)

QSO results:

All states were worked except VK6. Usually VK6JQ in Broome is heard, but nothing this season so far.

Best day

The best day overall in my shack was December 23

Cheers from Graham VK6RO/
VK6SIX IN OF77XX."

In VK5, the band was open on most days in December, often from first thing in the morning until late in the evening. On many days all states were worked with often very short skip occurring. There were several openings to VK3 and during one of these opening, stations from Mt Gambier were S9+ into the Adelaide area. Also on several occasions both sides of VK6/ZL contacts could be heard.

A welcome addition this season is the Darwin VK8VF beacon on 50.310. It has been heard in most states and it has been great to work several stations including Mark VK8MS, VK8AH, Richie VK8RR and Joe VK8VTX from the Darwin area. Along with the Darwin stations, Jeff VK8GF has been worked regularly from Alice Springs and this season Wayne VK8ZAA has been active from Alice.

Activity from VK7 has also been high this season with several active stations from both Northern Tasmania and Hobart.

I received the following information from Jack VK2XQ:

53 MHz Repeaters: Auckland (no callsigns on ZL repeaters) has a great repeater on 53.725 MHz in RF73, it's into Sydney most days; worked Grant ZL1WTT and Michael ZL1ABS, not many other ZLs use it.

Christchurch repeater was in on Saturday (6th January) morning on 53.850 MHz, no one worked, must have all been on 50 MHz! I usually cannot get this repeater as the Sydney W1A repeater is on this frequency. However, it has been off air during the past three days which is a bonus.

Both Adelaide repeaters regular in Sydney, however a lack of operators mean calls go unanswered. Worked Steve VK5AIM and a couple of others in recent days.

Both Tassie repeaters also into Sydney, a few VK7s worked on both.

52.525 MHz Simplex: VK4, VK5, VK7 and ZL3 worked during Dec/Jan festive season break. Congestion means it becomes unusable many times; I often get my contacts to drop to 52.500 or 52.475 MHz to escape the melee on 525. Rod ZL3NW in Christchurch worked at 2330Z on 52.525 MHz 5X9 report on Sat 06th Jan.

52.050 MHz (old call frequency): Some ZL2s and ZL1s heard/worked on this one, these ZLs are not allowed on 50/51 MHz due to Channel 1 TV restrictions and thus are only allowed 52 MHz and above. These fellows are largely forgotten there, one chap said I was the 1st VK he had worked in 7 years as everyone is on 50.110 these days. Also worked a VK4 and a VK7 on 52.050 MHz, the VK7 was a "H" call and said they are not allowed below 52 MHz.

Interesting Grid Squares worked:

VK2KRR QF34, VK3AS QF13, VK4EK QG36, VK5ZPG PF97, VK5GA QF05, VK5AYD PG71, VK6BE OF84, VK6WG OF84, VK6RO OF77, VK8MS PH57, VK8GF PG66, FK8GX TG28, FK8BG RG28, ZL2TMB RE79, ZL2DX RE78.

Last week (end Dec), the ZL's came in just after 5.00 am local time (1800Z) with James ZL3FV at Hokitika RE57 worked 5X7 at 1815Z or 5.15 am local!! I am usually up around 4.30 am. Also, yesterday I heard VK8RAS beacon at 1945Z or 6.45 am local, very surprising, VK2KRR was also hearing it.

Gary VK4ABW north of Townsville reported hearing the V73SIX beacon in the Marshall Islands 579 around noon on New Years Eve and at the same time the KH6 was just audible.

The New Caledonia beacon FK8SIX on 50.080 has been heard regularly in all states but unfortunately there appears to be very few active 6 m operators from FK8 and only a few contacts have been made.

December certainly was a very busy month on 6 m, with high activity from all states. It also has been very pleasing to work many stations new to 6 m, my log indicates that I worked approximately 60 new callsigns.

Please remember to send any 6 m information to Brian VK5BC at bcleland@picknowl.com.au.

ar

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• Visual, D/F Indicator Type 1 (Stores Ref. 10Q/2) for use with airborne radio receiver Model R-1155. Also, external to fuselage of aircraft, Loop Aerial Type 3 (to obtain D/F bearings). Ref: Manual A.P. 2548A, Vol.1, Chap. 5. Both for use in restoration project. Peter VK1CPK pkloppen@imetro.com.au, 02 6231 1790.

FOR SALE NSW

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WANTED NSW

• Wanted AR88. Alan VK2DRR alan4d@tpg.com.au.
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FOR SALE QLD

• 2 x 100 watt solid state linear amps 3-30 MHz GWO. VK4DV email vk4dv@yahoo.com.au, QTHR, phone no. 07 4928 5537 preferable nights.

WANTED QLD

• New Foundation licence amateur radio enthusiast looking for a suitable weatherproof preloved ATU to mount at base of a MOONRAKER type 29P 05 Marine HF antenna (HF Marine Band 2-30 MHz) for use with allowable Foundation Licence HF bands. Details/Contact to: Eldon [Don] Bryant, email: vk4fnqa@wia.org.au or landline at 07 4775 6579. Cheers 73.

• Directional aerial for 2 m/70 cm, also 100 W linear for 2 m/70 cm bands. Reply to Brent Doncliff VK4YOH at brentd@bigpond.net.au.

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• KENWOOD TS-120S HF Transceiver S/N 009130 with cradle and mounting bracket \$400. YAESU FT-101ZD HF Transceiver S/N 210496 \$400. YAESU FT-227R 2 m S/N 030880 with power supply \$150. YAESU FT-290R 2 m S/N 220378 Bracket and charger \$300. Universal antenna coupler HC-500A \$150. ICOM IC-745 HF Transceiver S/N 06191 5500. Realistic scanner Pro 2020 \$80. Contact Peter VK5BWH 08 8642 2363 or 08 8642 3424.

• VK5JST Antenna Analyser kits. [see AR article May 2006] Build yourself an extremely useful item for your shack, and improve your HF antenna efficiency. For more details see www.scarc.org.au; contact SCARC PO Box 333 Morphett Vale SA 5162, or email: kits@scarc.org.au.

• A give-away: A PRO SAT digital satellite receiver not in working order was given to me but is of no use to me. Satellite communication is not my "cup of tea" so to speak. If anybody would like this unit and can repair it, I would be happy to give this unit away to anybody interested who can restore this receiver. There is no external damage. M.M. Gell QTHR, Phone 08 8294 6906 evenings only.

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• SMALL HF VHF transceiver for use in a small car plus a suitable antenna for fitting to a Z type mounting bracket. Because of the limited space it would be necessary to "try the radio for size" max Space available approx 9" x 9" is this at all possible? Phone 08 8294 6906 evenings only.

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Directory

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a radio communications service for the purpose of self training, intercommunication and technical investigation carried out by amateurs, that is, by duly authorised persons interested in radio technique with a personal aim and without any pecuniary interest. 1.56 ITU Radio Regulations.

The Wireless Institute of Australia represents the interests of all amateurs throughout Australia.

The WIA offers one year and 5 year membership for all categories except Concession Student. The fees for each category are: Full members \$75 (\$365), Overseas members \$85 (\$403), Concession members (pensioner) \$70 (\$332), Concession members (student) \$70, Full members no magazine \$50 (\$237), Family members \$40 (\$190)

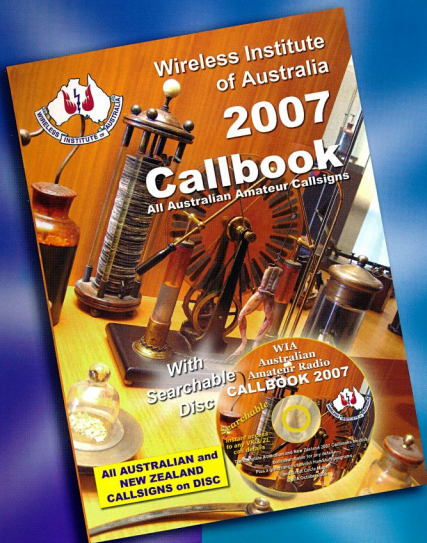
National Office	Contact	News Bulletin Schedule
10/229 Balaclava Road, Caulfield North VIC 3161 PO Box 2175 Caulfield Junction Vic 3162 Australia	Phone 03 9528 5962, Fax 03 9523 8191 10 am to 4 pm daily nationaloffice@wia.org.au http://www.wia.org.au	Subject to change. See www.wia.org.au follow National News prompts. Contact nationalnews@wia.org.au National VK1WIA news is distributed to all states.

Advisory Committees	Contact	News Bulletin Schedule
VK1 Australian Capital Territory VK1WX Alan Hawes VK1ZPL Phil Longworth VK1ET John Woolner VK1GH Gil Hughes	vk1advisory@wia.org.au	Sundays at 11.00 am VK1WIA 7.128, 146.950, 438.050 Canberra Region Amateur Radio Club Email newsletter will be sent on request to president@vk1.ampr.org
VK2 New South Wales VK2QV Chris Flak VK2XCD Chris Devery VK2BFN Adrian Clout	Phone 02 9689 2417 vk2wi@ozemail.com.au vk2advisory@wia.org.au	VK2WI - Sunday 1000 and 1930 hours local. 1.845; 3.595; 7.146; 10.125; 14.170; 28.320, 52.525; 145.600; 147.000; 438.525; 1273.500 megahertz. Plus regional relays. VK1WIA news included in the morning
VK3 Victoria VK3JJB John Brown VK3PC Jim Linton VK3APO Peter Mill	Phone 03 9885 9261 arv@amateurradio.com.au	VK1WIA, Sunday 11am and 8pm, 3.615 and 7.085 (LSB), 10.130 (USB). VK3RML 146.700, VK3RMM 147.250, VK3RMU 438.075.
VK4 Queensland VK4BY Don Wilcheffski VK4ZZ Gavin Reibelt VK4KF Ken Fuller	vk4advisory@wia.org.au	VK1WIA, Sunday 9.0am via HF and major VHF/UHF rpters
VK5 South Australia and Northern Territory VK5OV David Box VK5APR Peter Reichelt VK5ATQ Trevor Quick	Phone 08 8294 2992 boxesdnm@lm.net.au peter.reichelt@bigpond.com vk5advisory@wia.org.au	VK5 South Australia VK5WI: 0900 am local time. 1.843 LSB, 3.550 LSB, 7.140 LSB, 28.470 USB, 53.1 AM, 147.000 FM Adelaide, 146.900 FM South East, 146.925 FM Central North, 439.975 FM Adelaide North. VK8 Northern Territory 0900 local time 3.555 LSB, 7.050 LSB, 10.130 USB, 146.900 FM.
VK6 Western Australia VK6NE Neil Penfold VK6XV Roy Watkins VK6OO Bruce Hedland-Thomas	Phone 08 9351 8873 http://www.vk6.net/ vk6advisory@wia.org.au vk6ne@upnaway.com vk6xv@bigpond.net.au	VK6WIA: 146.700 FM(R) Perth at 0930hrs Sunday relayed on 1.865, 3.564, 7.075, 10.125, 14.116, 14.175, 21.185, 29.120 FM, 50.150 and 438.525 MHz, Country relays 3.582, 147.200 (R) Cataby, 147.350 (R) Busselton, 146.900 (R) Mt William (Bunbury), 147.000 (R) Katanning and 147.250 (R) Mt Saddleback. Broadcast repeated on 146.700 at 1900 hrs Sunday relayed on 1.865, 3.564 and 438.525 MHz : country relays on 146.900, 147.000, 147.200, 147.250 and 147.350 MHz. Also in "Realaudio" format from the VK6 WIA website
VK7 Tasmania VK7ZAX Phil Corby VK7DG Dale Barnes VK7KK Reg Emmett	Phone 03 6234 3553 vk7advisory@wia.org.au phil.corby@tassie.net.au vk7dg@wia.org.au regemm@ozemail.com.au	VK1WIA Sunday 9am on VK7WI network: 3.570MHz LSB, 146.700 MHz FM (VK7RHT South), 53.825MHz FM (VK7RAD South), 147.000MHz FM (VK7RAA North), 146.750 FM & 53.825MHz (VK7RWN North West), 146.625 MHz FM (VK7RMD North West), UHF CB Channel 15 (Hobart) and 27MHz CB - 27.225MHz LSB (Hobart). Followed at 9:30am with VK7 Regional News Broadcast also on 7.090MHz LSB & 14.130MHz USB

Notes

1. Only three members of the state advisory committees are listed.
2. All listings are preliminary. They will be updated each month as required.
3. Membership application forms are available from the WIA web site www.wia.org.au or the national office address above.

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